THE MINISTRY OF EDUCATION OF THE REPUBLIC OF AZERBAIJAN

AZERBAIJAN STATE UNIVERSITY OF ECONOMICS

INTERNATIONAL CENTER OF GRADUATE EDUCATION

MASTER DISSERTATION

on the topic

"CODEX ALIMENTARIUS, FOOD EXPORTS AND FOOD PRODUCTION"

Ali Afandiyev Ilham

BAKU – 2022

THE MINISTRY OF EDUCATION OF THE REPUBLIC OF AZERBAIJAN
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INTERNATIONAL GRADUATE AND DOCTORATE CENTER

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Elm andı

Mən, Əfəndiyev Əli İlham oğlu and içirəm ki, “Codex alimentarius, food exports and food production” mövzusunda magistr dissertasiyasını elmi əxlaq normalarına və istinad qaydalarına tam riayət etməklə və istifadə etdiyim bütün mənbələri ədəbiyyat siyahısında əks etdirməklə yazmışam.

QİDA STANDARTLARI, QİDA İXRACATI VƏ QİDA İSTEHSALI

XÜLASƏ

Tədqiqatın aktuallığı: Azərbaycan tarixinin minilliklər boyu ən şərəflisi sayılan Vətən müharibəsində xalqımızın Ermənistan üzərində qazandığı tarixi qələbədən sonra işğaldan azad edilmiş ərazilərin bərpası istiqamətində konkret işlər görülür.

Tədqiqatın məqsəd və vəzifələri: Bölgənin iqtisadi potensialının təhlili: regionun reabilitasiya və yenidənqurma imkanlarını və güclü tərəflərini eyni zamanda bu yolda potensial təhlükə və zəif cəhətləri aşkara çıxarmaqdır.

İstifadə olunan tədqiqat metodları: Tədqiqatda ikinci dərəcəli məlumatlara əsaslanan hesabat məqalələri, bundan əlavə isə, regionun güclü, zəif tərəfləri, imkanları və təhdidlərini qiymətləndirmək üçün SWOT təhlilindən istifadə edilmişdir.

Tədqiqatın informasiya bazası: Tədqiqatda istifadə olunan məlumatlar yerli dövlət və qeyri-özəl təşkilatlar tərəfindən hazırlanmış hesabat və təhlillərə əsaslanır.

Tədqiqatın məhdudiyyətləri: Məhdudiyyətlər regionun 30 ildən artıq işğal altında olduğundan yenilənmiş, etibarlı məlumatların olmaması ilə əlaqədardır və Ermənistan respublikasının məsələ ilə bağlı statistik məlumatları etibarlı mənbə hesab edilmir.

Tədqiqatın yeniliyi və praktiki nəticələri: Mövzu mövcud vəziyyətə aiddir və postsovet ölkəsinin işğaldan azad edilmiş bölgəsinin münaqişədən sonrakı reabilitasiyasına dair ədəbiyyatın çatışmazlığından əziyyət çəkir. Ədəbiyyatda işğaldan azad edilmiş münaqişə bölgəsinin reabilitasiyası tam öyrənilmədiyindən bu mövzuda boşluq vardır və hazırkı tədqiqat bu boşluğu aradan qaldırılmasına istiqamətlənmişdir.

Nəticələrin elmi-praktiki əhəmiyyəti: Kənd təsərrüfatı sektorunun regional inkişaf üçün böyük potensialı var və logistika sektorunun inkişafı investisiyaları və regional inteqrasiya proseslərini gücləndirə bilər. Yeniliyin tətbiqi regionun inkişafı və çiçəklənməsi üçün mühüm amil kimi qiymətləndirilmişdir.

Açar sözlər: Codex Alimentarius, Qida İxracatı, Təhlükəsizlik, Bootstrap reqressiyası.

CODEX ALIMENTARIUS, FOOD EXPORTS AND FOOD PRODUCTION

ABSTRACT

The actuality of the subject: After the historic victory of our people over Armenia in the Patriotic War, which is considered the most glorious in the history of Azerbaijan for many millennia, concrete work is being done to restore the liberated territories.

Purpose and tasks of the research: The analysis economic potential of the region: define the opportunities and strengths of the region for rehabilitation and reconstruction at the same time to reveal the potential threats and weaknesses in that path.

Used research methods: In the study is based on secondary data reports articles. In addition, SWOT analysis was used to evaluate the region's strengths, weaknesses, opportunities, and threats.

The information base of the research: The data used in the research is based on the reports and analysis made by domestic public and non-private organization.

Restrictions of research: Limitations relates to the lack of updated, robust data since the region was under occupation for over 30 years, and statistical data of the Armenian republic on the issue is not a reliable source.

The novelty and practical results of investigation: The topic relates to the current situation and suffers from the lack of literature on the post-conflict rehabilitation of the liberated region of the post-soviet country. In the literature, the rehabilitation of the liberated conflicted region is not studied and represents a gap, which the current research intends to fill.

Scientific-practical significance of results: The agricultural sector has enormous potential for regional development, and logistics sector development can boost the investments and regional integration processes. The implementation of the innovation was discovered to be an important factor in the region's development and prosperity.

Keywords: Codex Alimentarius, Food Export, Safety, Bootstrap regression.

ABBREVIATIONS AND SYMBOLS

AOP	Protected Place of Production
BVL	Federal Office for Consumer Protection and Food Safety
CETA	Canada Comprehensive Economic Trade Agreement
COFRAC	French Accreditation Committee
ECOSOC	United Nations Economic and Social Council
EFSA	European Food Safety Authority
EITI	Extractive Industries Transparency Initiative
EU	European Union
FDI	Foreign Direct Investment
FVO	The Food and Veterinary Office
GATT	General Agreement on Tariffs and Trade
IDF	International Dairy Federation
IGP	Indication of Origin Protected
ISO	International Organization for Standardization
RASFF	Food and Feed Safety Alerts
SPS	Sanitary and Phytosanitary Measures
TPP	Trans-Pacific Partnership
TSA	Transportation Security Administration
TTIP	Transatlantic Trade and Investment Partnership
UNECE	United Nations Economic Commission for Europe
USD	United States dollar
WTO	World Trade Organization

TABLE OF CONTENTS

INTRODUCTION

Relevance of the topic: The Joint FAO/WHO Food Standards Program, which aims to protect customers' health and promote appropriate procedures in the food trade, is implemented by the Codex Alimentarius Commission. The Codex Alimentarius (Latin for "food law" or "food code") is a collection of uniformly laid out worldwide food regulations. It also includes codes of practice, guidelines, and other suggested actions to help the Codex Alimentarius set of standards achieve its goals. The Codex Alimentarius is being published to provide direction and support in defining and adopting food classifications and standards, as well as assisting in harmonization and, as a result, enabling international trade. The problem of food security has two meanings. One of them is the self-sufficiency of each country in food, and the other is the environmental safety of the products, products without additives (GMO-free) that can adversely affect the human body. The food security sector does not guarantee the complete prevention of food imports into the country. In other words, no country in the world can provide itself with food at the expense of local production. In order to develop the food sector, export plays a vital role. So that increase in the exported food encourages the countries agricultural development and economic growth.

Food security and export are now the main focus of every state. In addition to providing the population with the necessary food resources, agriculture provides a part of the budget of any country. The problem of food security has two meanings. One of them is that each country is self-sufficient in food, and the other is the ecological safety of the products, products without additives that can adversely affect the human body. Food security does not mean a complete cessation of food imports into the country. In other words, no country in the world can provide itself with food at the expense of local production. Another factor is the encouragement of food export which is the main driving force for agricultural development.

Problem statement and level of study: Every country faces specific difficulties in ensuring food security and food export issues. It is mainly due to its strategic geographical position, ranging from political and economic reasons. The most important thing is its geographical location, where there are lands unsuitable for food security, desertification, water shortages, climate, relief.

Purposes and objectives of the research: Food security's major purpose is to provide the people with required, eco-friendly food products while also promoting food production through export. One of the most global challenges facing humanity is food security. One of any country is to reduce imports into the country and increase the export.

The object and subject of research: The research object is the agricultural enterprises of Azerbaijan, and the subject is the detection of problems and their solutions in food export and food safety.

Research methods: interview questionnaire, mathematical-statistical, analysis were used to prepare the dissertation. The research database consists of a primary source (respondents answers) at the same time other secondary resources like resources on food security in the State Statistics Committee of Azerbaijan, the Strategic Road Map of Azerbaijan, the Food Safety Agency of the Republic of Azerbaijan, the library of the National Academy of Sciences, periodicals, magazines, and the Internet.

Research database: During the research, many statistical indicators, annual reports of international journals and journals, scientific researches and articles were included and used in the analysis.

Limitations of the study: There were several limitations in the preparation of the study. It includes the lack of literature in the Azerbaijani language, the lack of research in this area, the obsolescence of books, and the fact that the relevant agencies do not update the database every year.

Scientific novelty of the research: The research is aimed at overcoming the existing limitations of information on the rehabilitation of liberated territories, and scientific innovations have been obtained in this regard.

The scientific and practical significance of the results: The importance of the results is that the study of this area is to prevent future problems, develop agriculture, and promote food exports.

CHAPTER I. CODEX ALIMENTARIUS

1.1. Literature Review

Henson and Loader (2001) investigate the influence of sanitary and phytosanitary controls in rich nations on exports of food and agricultural items in developing nations. They revealed that developing nations experience satisfying sanitary and phytosanitary standards and how they relate to sanitary and phytosanitary measures and the complying funds allocated to authorities and the distribution network. The article studies the influence of the WTO's sanitary and phytosanitary Agreement on the degree to which sanitary and phytosanitary regulations inhibit exports from emerging nations. They found that the challenges that restrict the involvement of developing nations in the sanitary and phytosanitary Agreement and their reservations about the method in which it now runs (Henson S., 2001).

The Codex Secretariat used USD 8.738 million of the overall budget of USD 8.789 million for 2016-17. The most significant part went to financing the expenditures of 12 fixed term staff employees (47 percent), trailed by translation, interpretation, and print shops for Codex meetings (18 percent) and consultation as well as agreements with outsourcers (16 percent). Sessions of the Codex Alimentarius Commission and its Executive Committee accounted for 20 percent of the expenditure. Other significant activities in the 2016- 17 biennium included the preparation of guide manuals; seminars, and related properties for different Codex stakeholders; costs linked to the Codex website and many electronic tools utilized throughout the standard planning process (Food and Agriculture Organization of the United Nations and World Trade Organization, 2017).

The function of the WHO IFAO Food Standards Project has been crucial since the Uruguay Round of GATT as compliance to Codex Standards guarantees suitable habitat in Proceedings. This article highlights the Programme’s history and triumphs, addresses Codex’s shifting position owing to GATT and WTO’s acceptance of its deliverable, and examines IXACCP and other contemporary

concerns. It also outlines where the Codex Project is regarding streamlining its events by highlighting the importance of research in its deliberations, increasing the timing of its actions, and recasting its proposals for national government approval of its criteria (Garrett et al., 1998).

Henson and Loader (2001) highlight that numerous types of collaboration that are of special relevance to everyday operations in the food industry might become the target of prosecutorial attention by competition authorities. The rising relevance of competition law shows that the market actors must assert themselves not simply against their opponents and their competitors in the marketplace in times of strong rivalry. If they wish to follow the orders of regulatory agencies and courts, they are also heavily confined in the architecture of their supply and collaboration agreements. In order to minimize everyday interference between issues and business considerations, it is highly recommendable to take into account competition law issues beginning at the stage of designing cooperation and sales and trade plans. This assures that potential consequences are limited and that an appealing idea may be executed in an atmosphere of reasonable legal certainty (Henson S., 2001).

Klotz (2018) investigated the relationship between institutional architecture and the formation, composition, and evolution of regulatory networks. The research focuses on the global legitimacy of Codex Alimentarius, which was approved by the World Trade Organization in 1995, and the subsequent radicalization of standard-setting procedures and global food governance in the years that followed. This version of the study includes an initial statistical analysis of a newly generated dataset on the participation of 196 countries, 327 non-governmental organizations, and 56 intergovernmental organizations in Codex Alimentarius standard-setting procedures. The information depicts a valuable affiliation network that tracks state and private institutions' participation in over 850 sessions of 43 representatives from 1963 to 2015. The preliminary descriptive study suggests strong evidence of increased politicization of Codex Alimentarius, as evidenced by the significant increase in the number of participating governments and non-actors, as well as the

significant increase in the number of representatives these performers send to the benchmark Codex committees after 1995. The United States remains the dominant player in Codex Alimentarius, according to preliminary results from complicated networks. Non-governmental organizations appear to engage in more Codex Alimentarius committees and/or submit more delegates to specific committees than most government institutions, according to the research (Klotz S., 2018).

Schmaljohann (2013) analyzed the impact of The Extractive Industries Transparency Initiative on FDI. The author stresses that the Extractive Industries Transparency Initiative was established in 2003 to tackle this issue via strengthening the efficiency of the public financial planning of resource flows. By joining this movement, nations express their readiness to change and improve their administration. As the quality of institutions is a key consideration for investors in determining where to invest, this signal can boost a state's appeal for foreign direct investment (FDI). In a panel of 81 nations, this analysis reveals that joining the EITI boosts the ratio of FDI inflows to GDP on the median by roughly 2 percent. This is an unusual growth considering that the group's overall mean of FDI inflows to GDP is five percent. The results are robust when adjusting for selection bias owing to the free decision to join the initiative and probably omitted variables of the candidate variable (Schmaljohann M., 2013).

Toma-Bianov (2013) explored the method in which Codex Alimentarius Commission figured prominently in creating international guidelines and how the Codex altered the World Trade Organization relevant law. They stress that the Codex norms are regarded as the baseline for international food norms; nonetheless, this circumstance led directly to extraordinary legal and political repercussions for the countries of World Trade Organization unless they were also participants of the Codex Commission. According to SPS and TBT Agreements, all Signatories are obligated to comply with the Codex food laws. Certain explanations on the function of Codex have been made via the WTO dispute settlement system (Bianov T., 2013).

An empirical analysis on how the role, position, and perception of the government - to - government food standardization body, Codex Alimentarius Commission, has altered after being alluded to by the World Trade Organization (WTO) as the "central reference point for the elaboration of international food standards." Both the Sanitary and Phytosanitary Measures Agreement and the Technical Barriers to Trade Agreement have measures that encourage WTO members to base their national rules on international standards. The essay focuses on critical topics in the Codex that may substantially influence international food trading. The general conclusion is that the WTO has contributed to restricting the activities and defining the expectations of Codex members. Governments participating in Codex activities have changed their approach after 1995 owing to greater ambiguity concerning how decisions in Codex may be enforceable for them under the WTO Agreements (Veggeland and Borgen, 2005).

Zawistowski (2011) defines the word 'functional foods' as diverse connotations in different Asian nations, encompassing natural foods, functional health foods, foods enriched with minerals and vitamins, multivitamins, and even Chinese Herbal items. Depending of what moniker functional foods go under, their distinguishing feature is their therapeutic function. According to the author, this notion was established over two decades ago in Japan and was accompanied by developing a regulatory structure to manage such meals. Since then, functional and nutritious foods have demonstrated steady development in Japanese and other Asian markets. The Japanese example encouraged China, South Korea, and several other Asian countries to draft and execute legislation for the manufacturing and distributing functional foods. Some nations choose to either employ current food and medication rules or construct. The author finds that the others implemented Codex Alimentarius recommendations or embraced previously existing worldwide standards (Zawistowski J., 2011).

1.2. Origin of the Codex Alimentarius and Codex successes story

Early written evidence suggests that, in ancient times, authorities codified rules to protect consumers from dishonest practices in the food trade. Assyrian clay tablets describe the method used to determine the correct weight and measure of food grains, and Egyptian manuscripts require labeling certain foods. Beer and wine were examined for freshness and healthiness in ancient Athens, and the ancient Romans had a sophisticated food management system in place to safeguard consumers from fraud and low-quality products. Several medieval European countries enacted legislation governing the quality and safety of eggs, sausages, cheeses, beer, wine, and bread. This kind of ancient codes are still in use today. Science became the basis for the development of food codes in the second half of the 19th century, the first general food laws were introduced, and basic food control systems were introduced to oversee their implementation. In the same period, food chemistry was gaining recognition, and the definition of the "purity" of food products was based primarily on the chemical characteristics of simple food compositions. When dishonest businessmen learned to mask the true color or character of food with harmful industrial chemicals, the concept of “counterfeiting” began to be applied to food, implying the addition of hazardous chemicals to it. Science began to create tools to detect unfair practices in the food trade and distinguish dangerous from safe products. In the Austro-Hungarian Empire, standards and descriptions for some food products are being developed, called the Codex Alimentarius Austriacus (Austrian Food Code) (Vojir F., 2012). While not legally enforceable, it is used as a benchmark in determining food-specific identification standards by the judiciary. The current Codex Alimentarius derives its name from its Austrian predecessor. The variety of standard sets that resulted from the spontaneous and autonomous development of food legislation in various countries resulted in trade obstacles that became a significant issue for food marketers in the early twentieth century. As a result of these impediments, trade associations began to demand that governments standardize food standards in order to provide a safe environment for the commerce

of high-quality food. The International Dairy Federation (IDF), founded in 1903, was one of these organizations. The United Nations Economic Commission for Europe (UNECE) and the International Organization for Standardization (ISO), both established in 1947, were also crucial in unifying quality and safety standards in commerce. The world watched with particular concern the direction in which the legal regulation of food trade was developing. Countries acted independently of each other, only occasionally bothering to harmonize the adopted laws at the international level. This situation was reflected in the remarks that were expressed at international meetings of that time. In the 40s of the twentieth century, scientific and technological progress also affected the food industry. Better analytical tools have rapidly increased accumulated knowledge about the nature and quality of food and the associated hazards. There was a huge interest in food microbiology, chemistry, and other related disciplines, and discoveries were widely reported in the media. Publications of all levels published numerous articles on food, and consumers were bombarded with information in popular magazines, tabloids, and radio. Some articles were reliable, others were not, but all of them, according to the authors' plan, were supposed to capture the imagination and even make a sensation. However, as dubious as the quality of the individual materials was, these publications succeeded in raising public awareness of nutritional issues and ultimately helping to increase knowledge of food security gradually. At the same time, as food information became more and more readily available, the consumer had more and more fears. If earlier he was worried only about "visible characteristics": underweight, the difference in size, misleading labeling, and poor quality, now he began to fear "invisible characteristics" - pathogenic microbes, excess concentration of residual pesticides, insufficient "ecological purity," and harmful to the health of food additives that you cannot see, smell, or even taste. With the emergence of well-organized and informed international and national consumer groups, governments worldwide have come under increasing pressure from the public to protect themselves from unsafe and unsafe food. that FAO and WHO will take the lead in unraveling the backlog of food

control problems that have hampered trade and failed to provide adequate consumer protection. In 1953, the World Health Assembly, the governing body of WHO, stated that the growing use of chemicals in food production created a new health problem and invited the two organizations to conduct the necessary research. The first joint conference on food supplements was convened in 1955 by the FAO and the WHO. The outcome of this conference was the creation of the Joint FAO/WHO Expert Committee on Food Additives (JECFA), which has met regularly for over 60 years. JECFA's work remains fundamental to the Codex Commission's deliberations in developing standards and guidelines for food additives, additives, and veterinary drug residues in food. It has become a model for many other expert bodies of FAO and WHO and other scientific advisory organizations at the national or international regional level (Unnevehr, 2000).

In parallel with the further expansion of the participation of FAO and WHO in solving food problems, various committees set up by international non-governmental organizations to develop food standards have intensified. products. Over time, the work of these nongovernmental organizations committees has either been transferred to or continues with the relevant Codex food committees; however, some non-governmental committees were transformed into Codex committees. The years 1960 and 1961 were important milestones in the process of creating the Code. he first FAO Regional Conference for Europe, held in October 1960, affirmed widespread sentiment, stating that "the desirability of an international agreement on minimum food standards and related issues (including labeling requirements, methods of analysis, and other issues) is important as a means of protecting consumer health, ensuring quality, and removing trade barriers, especially in a European market characterized by rapid integration." "...coordinating a growing number of food standards programs across numerous institutions is a particular issue," according to the conference. Within four months of this regional conference, FAO began negotiations with WHO, the United Nations Economic Commission for Europe (UNECE), the Organization for Economic Co-operation and Development

(OECD), and the Codex Alimentarius Council for Europe to discuss proposals that could lead to an international standards development program on food products. FAO established diplomatic relations with WHO, the United Nations Economic Commission for Europe (UNECE), the Organization for Economic Co-operation and Development (OECD), and the Codex Alimentarius Council for Europe four months after the regional conference to discuss proposals that could lead to an international food standards development program. The FAO Conference's Eleventh Session issued a resolution establishing the Codex Alimentarius Commission in November 1961. The Sixteenth World Health Assembly authorized the Joint FAO/WHO Food Standards Program and established the Codex Alimentarius Commission Statutes in May 1963. It is how the Codex Alimentarius Commission was born, the first meeting held in Rome from June 25 to July 3, 1963. In 2013, Codex celebrated its 50th anniversary - 50 years of setting standards to protect consumer health and promote fair practices in the food trade. For over 50 years, thousands of experts worldwide have been working to create and improve a codified system of international food standards, and a world in which food is safe, high-quality, and affordable in every home is getting closer.

In their best traditions, the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) have advocated scientific and technical research in the food industry and a broad discussion of food-related issues. In doing so, they have raised the level of awareness of the world community of food safety to an unprecedented level. The Codex Alimentarius Commission, created by these two organizations in the 1960s, has become the world's premier reference point for food standards development. Consumers and governments around the world are listening to food quality and safety issues. They are becoming aware of the need to select the food they eat carefully (Сычик et al., 2017).

Today's consumers often require their governments to take legislative measures to ensure the safety and proper quality of food entering the distribution network to

minimize the risk of foodborne hazards. It can be argued that the work of the Codex Alimentarius Commission to develop Codex standards and address all related issues has contributed significantly to the fact that the food issue has become an independent section of the political agenda. Governments are now fully aware of the political implications of ignoring consumer opinion on food safety. The Codex Alimentarius Commission builds on the now generally accepted principle that people have the right to demand that their food is safe, of good quality. and usable. Foodborne illness is unpleasant at best and potentially fatal at worst. Nevertheless, there are other consequences as well. Foodborne disease outbreaks can wreak havoc on trade and tourism, resulting in lost wages, unemployment, and legal action (Yue et al.,2010).

Poor food quality can cause suppliers to lose their reputation as reliable trading partners, both domestically and internationally, and food spoilage is the waste of valuable resources that can negatively impact trade and consumer confidence. The positive effect of the Commission's activities is reinforced by the declarations adopted by international conferences and meetings under the influence of this very activity. Over the past 20 years, country representatives at the United Nations General Assembly, at the FAO/WHO Conference on Food Standards, Chemicals in Foods and Food Trade (held jointly with the General Agreement on Tariffs and Trade [GATT]), at the International The FAO/WHO Conference on Nutrition, the FAO World Food Summit and the World Health Assembly, WHO called on their countries to take action to ensure food safety and quality, on behalf of their countries pledged to do so. In global forums on food safety regulation, it was noted that the Codex system provides an excellent opportunity for countries to jointly develop international standards, representing the interests of all stakeholders. The role of the Codex Alimentarius Commission has evolved as Codex itself has evolved. Creating a food code is daunting in scope and virtually endless with the ongoing scientific research to develop new products. Extensive consultation is needed to develop food standards and compile them into a single, credible and respected compendium. In

addition, it takes time to collect and evaluate information, confirm the final results, and sometimes find an objective compromise that can satisfy sound, scientifically sound, yet different points of view. Establishing standards that simultaneously protect consumers, promote fairness in the sale of food, and facilitate trade is a process involving multidisciplinary food experts, consumer advocacy organizations, manufacturing and processors, and food control authorities. and trade enterprises. The more people are involved in the development of standards and the broader the scope of the Codex Alimentarius and related rules and regulations and recommendations, the more famous the Commission's activities become, and its influence increases and expand. While the Codex Alimentarius as it stands is a remarkable achievement, it would be misleading to see it as the only outcome of the Codex Alimentarius Commission for all its significance. The creation of the Codex Alimentarius resulted in another major achievement: The Commission opened the eyes of the world community to the threat of potential food safety hazards and the importance of food quality - and therefore, the need to have food standards. The Codex Alimentarius Commission serves as an international focal point and forum for professional, enlightened dialogue, and this is its essential role. The six joint FAO/WHO Regional Coordinating Committees also provide important geographic coverage for identifying the challenges and needs of each region in the area of food standards and food control. To underpin its work on food standards and codes of practice, the Commission creates authoritative guidance documents for food safety and consumer protection based on the most knowledgeable people and organizations involved in food and related issues. In response, countries enact food laws and Codex-based standards and establish or strengthen food control agencies that enforce these regulations. A major global program like the Codex Alimentarius needs periodic review to get the job done over the standards as efficiently as possible. The first full assessment of the Code was carried out in 2002. Among the aspects that are constantly being improved in the Code are the relevance and usefulness of the standards and the speed of the procedure for their establishment.

As a result of the assessment, some changes were made to the Code; in particular, the practice of holding annual sessions of the Commission was introduced, and the Executive Committee was given new responsibility to critically review work proposals and oversee the development of standards (Смирнова, 2014). Through its Trust Fund, Codex also works to improve practical and theoretical knowledge related to standard-setting in developing countries in order to strengthen and improve national food control systems. A recent 2015 global Codex awareness survey highlighted the need to strengthen Codex education and focus. Codex is now responding to the changing ways of finding information on the Internet and social media.

1.3. Codex Alimentarius and international trade of food products

It is generally accepted that the harmonization of food standards contributes to consumer health protection and simplifies international trade as much as possible. Although the Codex Alimentarius Commission does not mandate to facilitate trade, trade benefits from countries bringing their domestic standards in line with Codex standards. While growing international interest in all Codex operations demonstrates widespread approval of Codex's idea of harmonizing standards, safeguarding consumers, and enabling international trade, many governments find it difficult to incorporate its rules into national legislation. Differences in legal, administrative, and political systems, as well as the influence of national attitudes and notions of sovereign rights, obstruct harmonization and delay the acceptance of Codex norms. Despite the challenges, the standardization process is gaining traction, thanks to the international community's strong desire to promote commerce and the need of consumers all over the world to have access to safe and healthy food. More countries are aligning their national food standards or key aspects (particularly the safety provisions) with Codex Alimentarius standards. It's notably obvious in "invisible" food additives, pollutants, and residues. The Joint FAO/WHO Food Standards Program and the Codex Alimentarius Commission were founded and governed by

officials and experts who were primarily concerned with consumer health and fair trade practices (Food and Agriculture Organization of the United Nations and World Health Organization, 2016). They felt that these concerns would be handled organically if all countries harmonized their food laws and adopted internationally recognized standards. They thought that harmonization would lower trade obstacles and allow for more free movement of food across countries, benefiting farmers and reducing hunger and poverty. The Codex Alimentarius' creators decided that it would solve many of the obstacles to free commerce, which is reflected in the Codex Alimentarius' objectives, which are defined in the General Principles. All governments are concerned that imported food is safe, does not endanger consumer health, and does not endanger the health and safety of native flora and fauna. As a result, the governments of importing countries are enacting binding laws and regulations aimed at minimizing, if not eliminating, such hazards. Phytosanitary, veterinary, and food control procedures, on the other hand, might create barriers to cross-border food trade. The Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) and the Agreement on Technical Barriers to Trade are two trade agreements connected to food that are of particular interest in the Codex Alimentarius Commission's work (TBT Agreement) The GATT agreements reached during the Uruguay Round of Negotiations (1986-1994) were a watershed moment in the development of a multilateral trading system, as they were the first to apply norms and standards to agriculture and food products. As a result, the SPS and TBT Agreements were annexed to the 1994 Marrakesh Agreement Establishing the World Trade Organization as Multilateral Agreements on Trade in Goods (Veggeland F., Elvestad C., 2004). The SPS Agreement includes requirements for animal, plant, and human health protection. In terms of human health, it acknowledges that national governments have the authority to take sanitary and phytosanitary measures to protect citizens' health. However, the agreement states that they must only use these measures to protect people's health. It forbids member states' governments from discriminating against countries with the same or similar

prevailing conditions by imposing differing standards on them without acceptable scientific evidence. The TBT Agreement assures that technical rules and standards, such as packaging, marking, and labeling requirements, as well as methodology and analyses for assessing technical rule and standard compliance, do not unduly stifle commerce. The TBT Agreement, it should be noted, applies to all regulations and standards and is not limited to food goods. It's also worth noting that the SPS and TBT Agreements acknowledge the necessity of worldwide standardization to remove or reduce the risk of sanitary, phytosanitary, and other technical standards becoming trade barriers. For food additives, veterinary drug and pesticide residues, pollutants, methods of analysis and sampling, and hygiene standards and guidelines, the Codex Alimentarius Commission developed standards, guidelines, and recommendations. This means that Codex standards are accepted as scientifically useful benchmarks for evaluating national policies and laws. The WTO's particular recognition of Codex standards aided in the creation of strong interest in the Commission's activities. It has led to a significant increase in the number of people attending Commission meetings, particularly from poorer nations. This is a positive development, especially given the SPS and TBT Agreements require contracting parties to "completely participate" in the activities of international standardization organizations and their subsidiary bodies, within their capacities. It is critical that Codex standards be adopted as scientifically grounded rules for the SPS and TBT Agreements. International trade is facilitated by harmonization, and standards have become an intrinsic part of the legal system. Codex standards aim to prevent and resolve trade disputes at the World Trade Organization (WTO). They serve as a standard, and it is likely that they will be utilized in this capacity more frequently in the future. Many bilateral and multinational trade agreements refer to the Codex Alimentarius. Trade accords, such as the Trans-Pacific Partnership (TPP) of the twelve Asia-Pacific countries, the EU-Canada Comprehensive Economic Trade Agreement (CETA), and the EU-US Transatlantic Trade and Investment Partnership, have recently been concluded or are presently being negotiated (TTIP)

(Labonté R., Schram A., Ruckert A. (2016)), contain provisions on SPS and invariably refer to the standards adopted by the Codex Alimentarius Commission.

1.4. Codex Alimentarius and future perspectives

The Code works incessantly. It is impossible to stop work because food is a special commodity. Nonetheless, what obstacles will Codex have to overcome in order to maintain its position as the most authoritative body for establishing scientifically-based international food safety and quality standards? Codex's plan recognizes the need for a more forward-thinking response to new technology, food falsification, and the advent of new viruses, and is already tackling emerging concerns including climate change and new strategies to lessen agriculture's environmental impact. The Sustainable Development Goals of the United Nations serve as a framework for expanding Codex in order to ensure food safety and quality, eliminate trade restrictions and inefficiencies, and promote year-round access to safe, nutritious, and sufficient food. Consumers now are more aware of food safety issues than ever before, and they are becoming more sensitive to information about the food they eat, whether on the label or in the media. This means that the Code should continue to influence public perceptions of food safety (Никитченко, 2010). The legitimacy of the Code is founded on the belief that the finest work outcomes are achieved in environments that promote inclusion and openness, agreement, and cooperation, as well as a sound scientific foundation and factual analysis. Some values should not alter as old systems give way to the Internet, new items enter the market, and innovative technologies (some of which have yet to be conceived) arise that affect the food we eat from farm to plate. All actors who are empowered to work with consistent and standard rules of the game will gain from increasing Codex's worldwide relevance by promoting the construction of national food control systems in developing nations. Codex will be able to compare itself to the finest by collaborating with other organizations. Food safety measures will always be required, regardless of the future, and those measures must fulfill internationally

recognized, universal standards that have been determined by consensus and are based on sound scientific evidence. The Code will be made up of these criteria. Only a country with a well-developed legal framework governing the circulation of food items, as well as the technical and administrative infrastructure to enforce these laws, may embrace Codex standards. For many years, FAO and WHO have aided poor nations in gaining full access to the Commission's advantages. Financial and technical aid from industrialized countries and international financial organizations are key components of this assistance. Developing countries' socioeconomic standing is improved by enabling them to build their food control systems. Improved food control systems result in greater home food safety, putting less strain on health services, reducing sick leave from work and school, and improving nutrition. At the same time, chances for exporting food items are developing, boosting the GDP of these countries. Among the services provided to developing countries are:

- Assisting in the establishment and strengthening of national food control systems, including the development and amendment of food legislation (laws and regulations) and food standards in accordance with Codex standards;
- Assisting in the establishment and strengthening of food control agencies, as well as training staff in the technical and administrative skills required to ensure their effective functioning;
- Strengthening the food control laboratory and analytical basis, as well as organizational and technological skills;

• Holding workshops and training courses to impart information, expertise, and skills related to food control, as well as to enhance awareness of the Codex Alimentarius and the Commission's actions;

• Food quality control training in all issues connected to consumer health and fairness in the food economy;

• Providing recommendations on issues that are directly related to Codex activities, such as assessing the safety of biotechnology-derived food items;

• Preparation and publication of food quality control manuals and texts, as well as advice for the construction and maintenance of food quality control and safety systems;

• Preparation and publication of training materials on food control and quality assurance, with a focus on the HACCP system's use in the food sector.

The Fund for Standardization and Trade Development is a global initiative aimed at improving organizational human resources and providing technical help in trade-related sanitary and phytosanitary measures. It is housed at the WTO headquarters (SPS). When the presidents of the FAO, OIE, World Bank, WHO, and WTO released a joint communiqué in 2001, they pledged to identify new technical and financial channels for coordination and resource mobilization to assist poor countries in taking and implementing suitable actions. The fund serves as a finance and coordination tool. It gives financial aid to developing countries that want to enter or maintain their market position by adhering to worldwide SPS standards. It also serves as a discussion forum for the five partner organizations and potential donors to discuss SPS technical support. The Fund's goals are to: Serve as a hub for the spread of excellence through innovative demonstration projects; address long-term staffing and compliance challenges rather than focusing on short-term policy-driven firefighting projects; and provide developing countries with specialized technical knowledge and experience in this complex technical field (Davies, 1997).

The food safety system in France One of the best practices for ensuring the safety of food products and raw materials is France's food safety system. The country has favorable climatic conditions for agricultural production. Agricultural production in France is provided by farmers who make up 4% of the country's population, rice. The Charles breed of cattle dominates livestock breeding. The average size of a farm is 70 cows; the maximum is 300 - 400. There are 46 natural parks in France, implementing numerous programs for sustainable development of territories. A characteristic feature of these programs is their complexity and consistency in their development and implementation. Agricultural production in

France is carried out under strict control and with substantial financial support from the state. In 2009, direct 51 aid to the country's agricultural producers alone amounted to 16 billion euros. Three-quarters of the funds go through the EU and a quarter through the state. The TSA agency is the intermediary between the state and the manufacturer. The agency carries out 5.5 million payments per year, 114 million operations for the return of funds. Control over such significant financial flows plays an important role. For example, the Regional Center of the TSA in Burgundy carries out 28 thousand checks a year. 20% of employees of the regional center (15 people) are controllers. They work with documents and travel to farms. There are 5 control points in food production: - manufacturer - food quality protection syndicate - control at the national level - control by the certification body - control at the commune level. In addition, private and other types of regulations can be applied. The Ministry of Food, Agriculture, and Fisheries ensures food safety in the veterinary and phytosanitary areas in the following areas: - animal health - animal welfare - plant health - environmental protection - public veterinary health, foodborne toxicity investigations Ministry of Trade and consumers perform the functions of ensuring trade on mutually beneficial terms. The Ministry of Health provides foodborne disease investigations and water safety surveillance. The Directorate-General for Food (DGAL) deals with food safety at all stages of the production chain, from raw materials for livestock or planting to retail (https://www.fda.gov/international-programs/confidentiality-commitments/dgal-france-fda-confidentiality-commitment-food, 2018). The General Directorate of Food deals with food quality assurance (variety, hygiene, and nutritional standards, food sufficient for everyone). Ministry of Health Ministry of Food, Agriculture and Fisheries Ministry of Trade and Consumer Affairs Directorate-General for Competition, Consumption and Anti-Fraud Region Prefect Directorate-General for Enterprise, Competition, Consumption, Employment and Education Directorate-General for Food, c / x and forestry Regional Food Service Regional Health Agency DEPARTMENT PREFECT Departmental Directorates for Population Protection Department Health

Agency Directorate General Food Directorate General Health Ministry Ministry of Health Ministry of Food, Agriculture and Fisheries Ministry of Trade and Consumer Affairs Directorate General on Competition, Consumption and Anti-Fraud Regional Prefect Directorate General for Enterprises, Competition, Consumption, Employed Education Directorate General Food, Agriculture and Forestry Regional Food Service Regional Health Agency Department Prefect Departmental Directorates for Population Protection Department Health Directorate Directorate General Food Directorate General Health Directorate General Food with its tasks, and oversees its implementation in the field. The Directorate-General for Food allocates a budget for functioning at the regional level, transferring budget funds to the Regional Directorates for Food, Agriculture, and Fisheries. Budget funds are intended for planned and extraordinary events. Thus, in 2010, the total amount of transfers to all Regional Directorates for Food, Agriculture, and Fisheries amounted to 565 million euros. Thus, there is an inextricable vertical of power in France from the central to the local level. The Departmental Directorates for the Protection of the Population (DDPP) share the same goals: - to produce in a safe, harmless and painless way - the scope of activity includes the entire food chain from the early stages of processing to final shipping operations - control is carried out “from stall to All Departmental Population Protection Directorates are responsible for the following activities: 1. Public Health: Departmental Population Protection Directorates ensure that the requirements for transmissible animal diseases are properly followed. Directorates are responsible for ensuring food safety and preventing the risk of food contamination. Departmental Directorates for Population Protection organize inspections at factories and verify the self-control exercised by food or feed producers. The Department of Population Protection Directorates annually develop official plans for the surveillance and control waste and substances. 2. Animal Health: The Department of Population Protection Directorates organize epidemiological surveillance of major animal diseases. Any diagnosis or declaration of a disease leads to an immediate response based on prompt action. 3.

Environmental Protection: Departmental Public Protection Directorates ensure that farms or plants do not adversely affect the natural environment or natural resources. 4. Departmental Public Protection Directorates are responsible for sanitary inspection of seafood and plants. 5. Mutual trade. The responsibilities of the Departmental Directorates for the Protection of the Population include ensuring that participants comply with the rules for mutually beneficial trade. The Departmental Directorates for the Protection of the Population perform several government functions to ensure food safety. They issue permits to 55 enterprises (or register them depending on the legislation) that meet the requirements of the European Union. Departmental directorates for protecting the population exercise official control at all stages of the food chain (production, processing, retail, including transportation of goods). They also check compliance with the requirements for the operation of enterprises, hygiene of premises, transportation, storage. Employees of the Department of Public Protection Directorates have the right to - carry out inspections in food processing enterprises, night and day, during the production phase - seize food for additional checks or laboratory tests - destroy food unfit for human consumption Selected employees of the Department of Public Protection Directorates to work in slaughterhouses throughout the year, where their duties include conducting daily sanitary inspections of meat. Regional product approval in France is more important than EU approval (Narrod C, Dou X., Wychgram C., Miller A, 2018). When it comes to food safety, creative approaches are often used. For example, to prevent milk suppliers from hiding tainted or contaminated milk, dairies pay the cost to the producer. Otherwise, heavy fines are envisaged. The Departmental Directorates for the Protection of the Population also perform some functions to ensure the safety of exported food products. Departmental directorates for the protection of the population issue permits to enterprises (or register them depending on the legislation) that meet the requirements of third countries. Departmental directorates for the protection of the population exercise control over local compliance with the requirements of third countries. Departmental

Directorates for Population Protection are responsible for certifying the quality of animals, plants, food, or feed. Veterinary certification (the fact of issuing an official veterinary certificate) guarantees compliance with all sanitary requirements. The certification is carried out by an official veterinarian (EC Regulation 854/2004) (civil servant with an official sanitary mandate). The French Veterinary Administration authorizes him to carry out these instructions. He is not subject to any commercial or financial pressure. A package of legislative acts outlines the field of his activity. He is familiar with veterinary legislation or certification procedures. In France, the certification methodology is standardized. Only highly qualified official veterinarians are authorized to issue certificates. They verify the information required for the certificate. The certificate is issued by: - a veterinarian of one of the departmental directorates for the protection of the population - a veterinarian in a slaughterhouse with an export permit - in very few cases - a veterinarian at a border crossing (Marseille) Directorate-General for Food, regional and departmental levels have recently been accredited. In France, official recognition (accreditation) is carried out by the French Accreditation Committee COFRAC, the only authorized organization by decree of 19.12.2008. Accreditation is the prerogative of the government (Decree of the European Parliament of 9 July 2008). France has anticipated the emergence and spread of distinctive marks for high-quality food products. For example, an authentic, specific local product that falls under the controlled name with the designation of the place of production (AOC), which has long been used in France, bears the imprint of culture, history, technology, observance of traditions that is, all elements inherent in a particular area. Such a product embodies all their diversity and is a national cultural heritage. Taking into account the experience of France, a united Europe introduced measures in 1992 to protect such specific products. Within the European Union, the Protected Place of Production (AOP) name serves to protect AOC. Geographical Indication of Origin Protected (IGP) also refers to products associated with a specific area of origin. For many years, the quality assurance policy pursued in France laid the foundations for

a true industrial ethics of the agro-industrial complex and provided it with legal tools that make it possible to determine the origin of products, appreciate specific technologies, and protect the names of goods. In addition, special laws were adopted in the field of health and environmental protection to include in the concept of quality any measures aimed at the rational use and reproduction of natural resources. A special French legal mechanism including controlled names with the designation of the place of production (AOC), the introduction of agricultural brands, since 1980 includes a certificate of conformity and the designation "organic agricultural product" (AB). These officially recognized tools assume product compliance with specifications and validation by official certification bodies approved by government authorities, following a positive opinion from the Agricultural and Food Trademark and Certification Commission. The four French marks (AOC, agricultural mark, certificate of conformity, and the designation "Organic Agriculture Product") have been directly extended in European legislation to combine the legal protection of names of products with a specific geographical origin, products produced by traditional methods, and products of organic agriculture. Any application to protect a product by assigning an AOP must be accompanied by an AOC Controlled Name Application filed with the national authorities. Any application to protect a product by assigning an IGP or to obtain a certificate of specificity can only be made as part of an application for a trademark or certificate of conformity. The structures with competence in European procedures are the National Institute for the Registration and Protection of Trade Names of Goods and the Trademark Commission, which give their opinion on the transfer by the French government to the European Commission of applications for AOP, IGP, or certificate of specificity. Many countries believe that products with a GI origin are of original quality due to specific local conditions and are a public good, a property that should be protected and protected. The quality of food products in France is controlled at all stages of their production and distribution. The production and distribution of food products are regulated by laws that determine the minimum

necessary conditions for the design, arrangement, and equipment of premises and the rules of hygiene for personnel and equipment. Compliance with these conditions is certified by the issuance of an official sanitary permit. State inspectors regularly check the compliance of these rules by specialists. So, hygienic and sanitary control is carried out from the moment of manufacture of the product to its sale to the consumer. To control the quality and safety of products, government agencies employ 5,200 inspectors. As a result of the measures taken to harmonize inspection and certification systems to create an enabling environment for the globalization of the food trade, European legislation has been amended. It now provides agribusiness professionals with the tools to fulfill their mandated responsibilities for the hygiene and quality of the products produced or processed. It is, on the one hand, the application of the principles of the risk and critical situation analysis system in the field of food quality assurance (HACCP), and on the other hand, the use of the quality insurance system by industrialists, in particular in the form of enterprise certification. Thus, the desire to ensure proper quality in all its versatility, while observing the totality of the above standards, is, in terms of increasing the cost of products through processing, as well as in terms of satisfying the needs of the French and foreign consumers, the main priority to which the state authorities attach the greatest importance. The French National Agency for Food Safety was established by the law of July 1, 1998, to strengthen sanitary supervision and control over the sanitary safety of food for humans. The Agency assesses “sanitary and food risks that can be carried by food products intended for humans or animals,” including risks “associated with water intended for human consumption, methods, and conditions of production, processing, canning, transportation, storage, and food distribution.” The Agency also assesses the risks associated with “diseases and infections affecting animals, drugs for controlling plant diseases, drugs for animals, particularly with drugs prepared immediately before use, with medicinal food additives, agricultural pest control agents and the like. substances, fertilizers and plant growth stimulants ", as well as" packaging materials and materials that must be in contact with the

above products. " To fulfill its tasks, this state institution at the national level, accountable to the ministries in charge of health, agriculture, and consumption, can consider any issues and propose to the competent authorities any measures aimed at protecting public health. Acting as a consultant for sanitation and surveillance programs, the agency can propose priorities and make recommendations. At his disposal are laboratories of state services, which are entrusted with monitoring the sanitary safety of food products and the laboratories assigned to him.

Experience in food safety assurance in Germany When it comes to improving food safety, in Germany in recent years, according to the Federal Minister of Food, Agriculture and Consumer Protection of the Federal Republic of Germany Ilse Aigner, a lot has been achieved. Organizational structures have been improved, food safety control has been strengthened, more transparent information for consumers has been provided, EU food legislation has been improved, and cooperation with information services in other EU member states has been strengthened. Scientists, business, and government officials have learned their lessons from past experiences. The knowledge gained about food allows them to increase the effectiveness of cooperation aimed at ensuring consumer protection. Germany's high level of food safety is recognized and appreciated all over the world. This turns products from Germany into goods that are in high demand in export markets. Those who say that food in Germany is now safer than ever are right. To maintain this situation in the future, continuous work on improving the food safety system remains a daily responsibility for all participants. The range of food products of one medium-sized supermarket in Germany is 10 thousand items of goods, in large branches - up to 60 thousand. Hundreds of varieties of bread, meat, cheese and sausages, fruits and vegetables from all over the world, fish from all seas, regional specialties and traditional international dishes, ham, pasta, and other products. Modern food processing, international trade, and an extensive logistics system make it possible to eat at any time, at any opportunity, and whenever convenient. It has never been so simple before. However, how is it possible to make sense of so many foods?

Moreover, this variety has its own "price." Global markets, international trade flows, and dynamic production technologies and consumption habits also introduce new risks and require new food safety strategies. If the European Commission decides to implement a new program for the quality and safety of products, this is reflected in the work of the inspectors responsible for food control in cities and regions of Germany. Furthermore, on the other hand, if a harmful substance is found in a food product in a laboratory, other European states should also find out about it. The distribution of tasks in the system is carried out at the local, federal, and EU level. In essence, this distribution is not difficult: everyone in their place must take care of food safety and know their partners in the food chain. The backbone of safety at the local level is the owners of the production and distribution of food products. They are primarily responsible for food safety, whether an industrial plant, a farmer, a baker, or a restaurant owner. Employees of city and regional authorities for food safety control and veterinary supervision carry out selective control of enterprises' products and quality management systems. The ministries of the federal states coordinate supervision activities at the state level. Representatives of the Länder, in turn, work closely with federal authorities, for example, when it comes to agreeing on federal programs to control product quality and safety and in the event of crises related to food products. When ensuring security at the federal level, the principle of delimitation of competencies is in effect. In addition to legislative work, the Federal Ministry for Food, Agriculture, and Consumer Protection (BMELV) is also responsible for developing other risk management measures. It has overall responsibility for selecting the appropriate measures. Scientific work is carried out by the Federal Institute for Risk Assessment (BfR) and four other research institutes. Their task is to provide advice to BMELV. BfR provides independent scientific opinions. As part of its practical work, the Ministry is supported by the Federal Office for Consumer Protection and Food Safety (BVL). The Federal Office coordinates the work between federal, state, and European Union authorities. A similar delineation of competencies exists in ensuring security at the EU level. Along

with the European Parliament and the Council of Ministers, the European Commission is one of the political partners BMELV cooperates with. She is advised by the European Food Safety Authority (EFSA). The Food and Veterinary Office of the European Commission (FVO) carries out tasks within the EU comparable to those of the BVL at the national level. The agency also checks the quality control and safety systems of products of the EU member states and third countries. Other bodies outside the EU develop food safety standards, such as the Codex Alimentarius (FAO Food Code). Specialists from Germany are also involved in this work. Only industrial products are subject to regulation in the European Union directives that require CE marking. As for food products, in the EU, the approach to them as an object of regulation differs from the approach to industrial products, primarily in that the main form of food conformity assessment is market surveillance. The documents defining the requirements for food are the CODEX ALIMENTARIUS standards. This commission was established by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) in 1961-1962 to protect consumer health and ensure fair food trade practices. The CODEX ALIMENTARIUS Commission organizes the development of worldwide food standards and guidelines, and codes of practice (World Health Organızatıon Food and Agrıculture Organızatıon of the Unıted Natıons, 2015). EU technical legislation is currently represented by three types of directives: general, "old approach," and new and global approaches. The main thing in conformity assessment in the EU countries is the principle of presumption of conformity, according to which the manufacturer in a legally binding form (in the form of a declaration of conformity) declares that his products comply with one or more harmonized standards. The IFS international food production standard establishes requirements in quality and safety systems management, enterprise resource management, production processes, responsibility management, assessment, analysis, improvement. The legislative system of the European Union plays an essential role in ensuring food safety in EU countries. European food legislation can

be divided into three main families: food safety, consumer information, and quality requirements. The main EU legislation in food and agricultural safety is regulation 178/2002 / EC. The regulation sets out the principles on which technical legislation in food safety is based: risk analysis and management, transparency, general trade obligations, general legal requirements, traceability of food and feed. The European Food Safety Authority (EFSA) should provide scientific advice and provide scientific and technical support to community legislation and policies in all areas of activity that have a direct or indirect impact on food and feed safety. Food safety in France is coordinated by the Ministry of Food, Agriculture, and Fisheries, the Ministry of Trade and Consumer Affairs and the Ministry of Health. Thus, there is an inextricable vertical of power from the central to the local level in France, including the above ministries, regional and departmental levels. The Departmental Directorates for Population Protection (DDPP) share the same goals: to produce in a safe, harmless and painless manner, the scope of activity encompasses the entire food chain from early processing to final shipping operations and is controlled from stall to table. ". The four marks used in France (AOC, agricultural mark, certificate of conformity and the designation "Organic Agriculture Product") have been directly extended in European legislation, which allows the legal protection of product names to be combined with a specific geographical origin of products produced by traditional methods and organic agricultural products farms. Germany's high level of food safety is recognized and appreciated all over the world. The German food safety system is one of the best practices in the European Union. The distribution of tasks in the system is carried out at the local, federal, and EU level.

CHAPTER II. INTERNATIONAL FOOD SAFETY ACTIVITIES IN PRODUCTION AND EXPORT

2.1. Activities of international organizations in the field of food safety

The World Bank's Global Food Safety Partnership (GFSP) is a one-of-a-kind public-private partnership to promote food safety in low- and middle-income countries. The major purpose of the partnership is to disseminate and coordinate capacity-building efforts in order to improve food safety systems, agrifood value chains, and public health outcomes. Instead of working separately and independently, the GFSP serves as a platform for interested international organizations, public companies, private manufacturing, processors and traders, technical service providers, leading academic institutions, consumer groups, and other stakeholders to come together and develop synchronized collaborative approaches to food safety issues. Food safety training and technical assistance are included in the GFSP so that developing nations can strengthen their food safety systems and benefit from food safety standards. Smallholders, food processors, retailers, supervisors and regulators, policymakers, and others benefit from the Partnership, which is tailored to the needs of specific nations and has a structure that reaches the full food value chain from top to bottom. The first FAO/WHO project and fund to encourage Codex participation (the Codex Trust Fund, or CFC) was inaugurated in 2003 by the FAO and WHO Director-Generals for a 12-year period (2004-2015). TFK has become a catalyst for highlighting the value of Codex to health and trade possibilities in developing nations and countries in transition, with over 2,300 delegates attending Codex meetings and over 1,000 participants receiving Codex training. The following program (CTF2) was launched in January 2016 for another 12 years (2016–2027), building on the success of the TFK. The new Codex Trust Fund will focus on establishing strong, strong, and durable capability in member countries to support the Codex's activities, rather than extending the Codex membership base (https://www.food-safety.com/articles/3825-new-directions-for-the-global-food-safety-partnership, 2016). To that purpose, the Fund will

fund: 1. 1-3 year projects in particular countries or groups of countries, taking into account the specific needs of each country/group of countries. 2. FAO/WHO capacity-building operations at the international, regional, and subregional levels that are tailored to the situation. We will have a more inclusive, objective, and collegial international standard-setting organization if all Codex Member States are fully engaged in defining international food safety standards. In this process, the FAO/WHO Codex Trust Fund plays a critical role. The full and effective participation of developing and transitional economies in Codex's work will provide them with a "triple benefit" of improved consumer health across the food supply chain, increased access to international food trade, and the economic benefits derived from improved health, population, and economic opportunities. Access to knowledge on food standards and laws is crucial in today's world. Consumers and the media have a right to access the results of evaluations of potential dangers in the food supply system, and everyone has to know what to do in an emergency if something "went wrong" in the system. Furthermore, all forms of food regulatory information may be found quickly on the Internet. However, there are situations when the information provided is redundant, conflicting, or just suspect. As a result, Codex-affiliated worldwide organizations are collaborating to provide credible information on food standards and related issues. INFOSAN allows the communication of food safety information between national and international food safety authorities. The food safety emergency communication network is one of the INFOSAN network's components, and it will implement the emergency information exchange system created in response to the Codex Alimentarius Commission's recommendation in its Guidelines for the exchange of information in emergencies in the field of food quality control." In international health emergencies, the INFOSAN Secretariat maintains a list of food safety emergency contacts and is in charge of information transmission between national authorities. It encompasses situations where food poses a significant international public health danger. WHO is in charge of INFOSAN? It's difficult to conceive a future where the Codex

Alimentarius does not exist. Consumer demand, WTO approval, an increasing number of attendees at Codex Commission sessions, and rising participation from developing nations all point to the Commission's long and active future. The major goal of intergovernmental organizations' trade coordination between countries is to liberalize global trade (Joseph Savelli C., Bradshaw A., Peter Embarek B., Mateus C., 2019). The basic goal of world trade liberalization initiatives is to eliminate or reduce existing obstacles between countries that obstruct the free flow of commodities, services, people, and capital. The free movement of products, services, people, and capital across countries is hampered by financial (tax), physical, and technical restrictions. Organizations operating on behalf of governments that have acceded to the international treaty and undertaking commitments to decrease or eliminate technical trade barriers are the subjects of commodities market regulation at the international level. The subjects are also the states that have signed the agreement and are responsible for ensuring that their internal product markets are supervised in accordance with the conditions of the agreement. The relationships between stakeholders about the procedures taken before the admission of items to the market, as well as measures connected to market surveillance, are the subjects of regulation on the part of intergovernmental organizations. All items, including industrial and agricultural goods, are covered by the World Trade Organization's Agreement on Technical Barriers to Trade. A special group is made up of animals and plants, the import of which into the territory of 38 different countries is regulated based on another document - the Agreement on the Application of Sanitary and Phytosanitary Measures. The World Trade Organization (WTO), created in 1995, replaced the General Agreement on Tariffs and Trade (GATT) as the only international body dealing with the global trade rules between states. It is not a specialized agency, but it does have mechanisms and practices to cooperate with the United Nations. The mission of the WTO is to help streamline the trading process within a rules-based system, fair settlement of trade disputes between governments, organizing trade negotiations.

Consumers worldwide have the right to expect the food they buy and consume to be safe and of good quality. Good, safe foods are the basis of good nutrition. In addition to ensuring consumer health, food security is also important to ensure access of agricultural producers to markets. It also contributes to economic development and poverty reduction. Food security is the foundation of our modern lives, and hundreds of organizations have been established to ensure food security. One of them is the United Nations Agricultural Organization. It is a special organization of the United Nations under the coordination of intergovernmental organizations. The Food and Agriculture Organization of the United Nations makes individual and collective efforts to supply agricultural products and the development of agriculture. One of the main tasks is to help developing countries in agriculture, forestry, and fisheries. FAO provides financial and moral support to research and organization in food security in countries other than developed capitalist countries. FAO participates in national and international events. FAO has prepared a global land map and participated in the preparation of the World Desertification Map. FAO is currently implementing about 50 desertification projects. These include Desalination Assessment and Mapping, Environmental Management of Dried and Semi-Pasture Plates, and more. Includes. Non-FAO countries participate in key UNDP programs. The FAO Center is located in Rome. (http://www.fao.org/home/)

The role of the FAO in ensuring food security. 21 Ensuring food security is a complex process that begins on the farm and ends with empty dishes. FAO is the only international organization that oversees all parts of the food production chain, thus providing an extraordinary 360-degree view of food security. The long-term partnership with the World Health Organization strengthens this vision. With additional mandates, the FAO and the World Health Organization cover a wide range of issues to support global food security and protect consumers' health. The World Health Organization generally monitors and maintains close ties with the public health sector and deals with food security issues throughout the FAO food security chain. Assistance to FAO member countries in food security is provided in

the following ways: Strengthen national food regulatory systems by: - developing incentives and related policies for national authorities based on factual information; - assistance to government agencies in reviewing and updating food legislation; - develop institutional and individual skills to identify food risk levels, take and analyze samples, coordinate risks, and conduct inspections to manage food safety. Work with local food producers in food and feed production to minimize or completely prevent environmentally hazardous foods; - Provide independent, comprehensive scientific advice to Member States and the Commission through the Microbiological Risk Assessment Expert Council (SSEOMR) and the Residual Nutritional Pesticides (OSEOP) Expert Committee on Food Additives (JECFA); - Dissemination of information on food regulation issues in the food processing chain; - To provide this sector with nanotechnologies and microorganism-resistant drugs; - Access to information through appropriate platforms, databases and tools to support the assessment and management of food security. That is, to facilitate access to information; - Establishment of Future Food Safety Authorized Networks (INFOSAN) through the Food Security Emergency Protection System (EMPRES) and rapid exchange of information on food security emergencies, etc. The Food and Agriculture Organization of the United Nations has been working with Azerbaijan for the past 22 years. Cooperates and continues to support national development priorities in agriculture, including fisheries, agriculture, food security, livestock, forestry, and fisheries.

To this end, the FAO has taken several projects and urgent measures to increase agricultural productivity, promote agricultural reform, and address food security issues in the country. Cooperation with Azerbaijan has recently assisted the government in agriculture, environmental policy, and legislation. In addition, the FAO has directed the Azerbaijani government to fish and fishing activities, the delivery of high-quality seeds to small farmers, and effective agricultural practices in the livestock and irrigation sectors of the dairy industry. In addition, the FAO's ability to manage cross-border animal diseases and acacia control may be related to

emergency preparedness and response. FAO's activities in Azerbaijan are being discussed at the FAO Regional Office in Budapest (Hungary). The FAO office in Azerbaijan was opened in August 2007 as part of the organization's centralization process. The main purpose of FAO's activities in our country is to meet the needs of agriculture and agriculture for the government and the people of Azerbaijan. The Government of Azerbaijan intends to be a resource partner of FAO to finance the organization's national projects, and FAO is ready to become potential donors in regional and global projects. With these resources and experience, the Republic of Azerbaijan will contribute to achieving the United Nations Sustainable Development Goals in Europe and Central Asia. In addition, the position of the FAO office in Azerbaijan has increased since 2007, and the FAO office in Azerbaijan was established in 2015. An agreement has been reached between the Government of Azerbaijan and the FAO to adopt a partnership program. The Partnership Program reflects Azerbaijan's growing national potential, state-funded policy planning process, and Azerbaijan's transformation into a broader country. Azerbaijan and the FAO are partners in this program and cooperate with other national priorities, sustainable agricultural development, and rural areas (http://unazerbaijan.org/en/un_agencies/). The European Food Safety Authority (EFSA) is an organization that represents the interests of EU countries in the food industry. EFSA is the cornerstone of the European Union's (EU) risk assessment of food security and feed safety. In close cooperation with government agencies and in open consultation with stakeholders, EFSA conducts an independent scientific assessment of existing and emerging risks (www.efsa.europa.eu). The Agency is an independent organization whose financial activities are included in the budget of the European Union. The Agency operates independently of the European Commission and the European Parliament and EU member states. The agency was established in January 2002 in Brussels after a series of food security crises in the late 1990s. It has been established as an independent community with a scientific approach to the risks closely linked to the entire food production chain and is based on research and testing

in food products and their production. The EFSA was established under the European Food Safety Management System to improve the food security of the European Union, ensure a high level of consumer protection and increase confidence in food security in the EU. As a risk expert, EFSA conducts scientific assessments and consultations in the interests of the European Union, the European Parliament, and EU members in making effective and timely decisions to ensure the protection of consumer health, food, and feed security in the European Union. The agency includes food and feed safety, animal health and welfare, plant protection, scientific advice on nutrition under EU law (http://www.efsa.europa.eu). The first of these initiatives is data collection and analysis. The ability to collect and analyze information is a key issue. The agency regularly publishes reports on food poisoning and foodborne illness. EFSA informs consumers about the food and how safe it is for them. Based on the information obtained, EFSA sets scientific goals for itself to improve diet. The second initiative is to identify risks in the European Union. Before Europe can affect food security in the European Union, it must respond to those who pose a threat to food security, identify them and assess the risks.

The Agency is tasked with identifying emerging or re-emerging risks arising from trade, climate change, or technological innovation in the European Union. Global Nest is an international community of scientists, technologists, engineers, and other stakeholders involved in applying methods for sustainable development, along with all scientific and technological aspects of the environment. The organization's primary goal is to support and promote the dissemination of information in the most modern ways to improve the quality of life through the application of environmentally friendly technologies and policies. (uk.wikipedia.org/wiki/global) The European Food Safety Organization has existing bodies with different names in many European countries. The International Fund for Agricultural Development (IFAD) is an international fund for common agricultural problems and helps poor rural residents. The organization was formed as a result of agreements at the 1974 World Food Conference.

IFAD's primary goal is to eradicate poverty in developing countries. 75% of the world's poor live in the villages of these countries, but only 4% of the funds allocated to support the world community are officially directed to the development of the agricultural sector (https://www.ifad.org/en/). The World Food Program (WFP) is the world's largest humanitarian organization, providing about 4 million tons of food each year. The WFP was established in 1963 as a food aid agency in the UN system. It is tasked with helping the poor in developing countries by fighting hunger and poverty. Uses food aid to promote economic and social development. The Global Nutrition Campaign aims to provide nutrition and education to 300 million children worldwide suffering from malnutrition. During emergencies, the WFP provides emergency assistance to support the lives of victims of military operations, natural and artificial disasters. The World Food Program seeks to strengthen cooperation with United Nations agencies, other international organizations, and civil society groups in three key areas: - Participation in various global, regional and national groups in leading interdepartmental coordination bodies for humanitarian assistance and development; - Cooperate with partners in the UN system and non-governmental organizations in operational and effort activities to increase their overall contribution to the development goals and the strategic goals of the five WFPs; - Protects the interests of hungry and vulnerable groups at major international conferences and meetings. In collaboration and partnership with UN agencies and non-governmental organizations, WFP aims to meet the needs of refugees and others in need of food, emergency care, nutrition, HIV / AIDS treatment, and education.

2.2. Ensuring the safety of food and food export in countries of the EU

As for food products, in the EU, the approach to them as an object of regulation differs from the approach to industrial products, primarily in that the main form of food conformity assessment is market surveillance. Much attention is paid to the problem of identifying consignments of food products entering the markets of the EU member states. For this, Directive 89/396 / EEC "On signs or symbols allowing the identification of the batch to which the given food product belongs" was adopted. It establishes that a food product can be sold only if it is accompanied by information, primarily in the form of labels or printed on the packaging, allowing the identification of the consignment of goods. Checking the availability of this information is one of the main tasks of the supervisory authorities. The CODEX ALIMENTARIUS standards are the documents that set the requirements for food products at the international level. This commission was established by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) in 1961-1962. to protect consumer health and ensure fair food trade practices. The CODEX ALIMENTARIUS mission organizes the development of worldwide food standards and guidelines, and codes of practice. Food law in the EU relies on them as the main documents applied in international trade based on the "Guidelines for the organization of activities" of the CODEX ALIMENTARIUS Commission. The Codex Alimentarius develops codes of practice for the inspection of animals before and after slaughter, hygiene rules, rules for storing fresh, canned, and frozen foods, natural mineral waters, issues such as safe limits for food additives, and risk assessment of genetically modified foods. These developments are recommended to governments as optional guidelines. Services as an object of regulation of the commodity market at the international level have not yet taken the same place as products, although the volume of trade in services between countries is proliferating (Godefroy S., 2014). National governments have the right to legislate requirements for services in the field of human safety and environmental protection and the necessary confirmation procedures, provided that this is based on agreements

or arrangements with the countries concerned. The United Nations Economic Commission for Europe (UNECE) is one of five United Nations regional commissions established in 1947 by the UN Economic and Social Council (ECOSOC) to promote economic activities and strengthen economic ties within the UNECE region as well as between the region and the rest of the world. The United Nations Economic Commission for Europe (UNECE) functions as a regional platform for governments to adopt agreements, norms, and standards to coordinate activity and simplify communication among member nations. UNECE fulfills this responsibility by providing consumers with assurances of safety and quality, helps protect the environment, simplifies trade procedures, and fosters closer cohesion among member states within the region and their fuller integration into the global economy. The main function of the World Health Organization (WHO) is to solve global health problems and protect the health of the world's population. WHO's work covers a wide range of issues. However, particular attention is being paid to the creation and development of effective health services, disease prevention and control, environmental health, and the health workforce's development. The IFS International Food Production Standard plays a vital role in ensuring food safety internationally. The IFS standard is based on ISO 9001 and HACCP principles and is focused on ensuring the safety of food products and packaging used in food production. The IFS standard provides: - complex requirements for the organization of food production, hygiene, implementation of technological processes, personnel competence - uniform criteria for assessing the ability of food manufacturers to produce and supply safe products following their specifications and legal requirements - reduction of producer costs for procedures Confirmation of Conformity of Food Products in the Supply. The requirements of the IFS standard are defined in such areas as quality and safety systems management, enterprise resource management, production processes, responsibility management, assessment, analysis, improvement (Bomba M., Susol N., 2020). Today IFS is considered the authoritative international safety standard for all food manufacturers.

In particular, the IFS standard is recognized by the largest retail chains, which cover more than sixty percent of all world trade. In the countries of the European Union, IFS is the most important standard for suppliers of leading retail chains. For example, to conclude a contract for the supply of products, members of the German Retail Society or the Federation of Trade and Distribution Companies of France must have an IFS certificate, regardless of the country of origin. The IFS standard is also widely used in Austria, Poland, Sweden, Italy, and other countries. IFS has created a common basis for the mutual evaluation of sellers, suppliers, and manufacturers of food products. In the field of agricultural product safety, the GlobalGAP International Standard has become widespread. (EurepGAP) - Good Agricultural Product Safety Practices (GAP) The goal of the GAP standard is to minimize the risks of agricultural production by tracking the entire production cycle. Good Agricultural Practice (GAP) is the creation of conditions that exclude the possibility of accumulation of harmful substances of chemical origin in the resulting products and anticipate mechanical and microbiological pollution. GlobalGAP certification guarantees that a specific product is received with strict adherence to all recommendations and requirements. Building a standard on HACCP principles allows to effectively manage production risks and identify critical areas that can, to varying degrees, affect the safety of grown products. The range of the standard is wide enough. It covers many industries in the crop, livestock, and fish farming. IFS standard requirements Management of quality and safety systems Management of enterprise resources Production processes Responsibility management Assessment, analysis, improvement. GlobalGAP is currently the world's most widely accepted agricultural product safety standard. It operates effectively in 80 countries, and the total number of certified farms is more than 80 thousand. Food safety and quality is an integral part of existence, well-being, and quality of life, included in continuous development and paying special attention to the protection of nature and the environment and regional demographic and economic conditions (https://ascconsultants.co.za/what-is-global-gap, 2021). The European Union is committed

to providing the safest food in the world. This approach is outlined in Directive 2004/41 / EC (93/43 / EEC). The European Union has developed such a policy in the field of conformity assessment, which allows, on the one hand, to ensure free circulation in the single internal EU market and, on the other hand, to ensure the safety of the consumer and the environment and the protection of consumer interests. This policy is embodied in the documents of the New and Global Approaches - European directives that ensure the uniformity of requirements for products and processes for assessing their conformity and are binding on all EU countries. Currently, EU technical legislation is represented by three types of directives: general; “The old approach The New Approach to Technical Harmonization and Standardization (1985) mainly envisages the creation of a single pan-European regulatory framework that defines the requirements for products, and the Global Approach (1989) develops its provisions in assessing the conformity of products to these requirements. The concept of the New and Global Approaches fully meets the main goal of creating the European Union - to ensure the free movement of products while ensuring the required level of safety. The New and Global Approach Directives establish fundamental (or general) requirements for products. These directives can be conditionally divided into horizontal and vertical. The horizontal directives contain fundamental requirements for specific risks and cover broad product groups. Vertical directives define the requirements related to risks by product group. The main thing in conformity assessment in the EU countries is the principle of presumption of conformity, according to which the manufacturer in a legally binding form (in the form of a declaration of conformity) declares that his products comply with one or more harmonized standards. Furthermore, this "statement" of his is valid until proven otherwise. The legislative system of the European Union plays an essential role in ensuring food safety in EU countries. Food safety legislation extends to food hygiene, food additives, food contact materials, new food products, and control systems. Most of these laws are horizontal. This means that requirements are set for a wide range of products and processes

horizontally. In addition, this legislation includes some provisions that are specific to food products (vertical). The second family of laws relates to consumer information, which is mainly presented on labels. The third family of laws setting quality requirements aims to protect the quality and includes “vertical” directives, directives for dairy products, dietetic products, and specific products manufactured in selected regions. The EU technical legislation includes about 250 legislative acts on food products and food raw materials; in the European Union, there are around 170 EU directives and regulations governing general food inspection and analytical methods. The EU's legislation reflects its WTO responsibilities and complies with the Codex Alimentarius Commission's criteria. The EU's food law is based on the Codex Alimentarius Commission's St. 300 International Standards. Each Member State has the responsibility to monitor compliance with EU directives independently. The directives also set out general principles for the control, sampling, and inspection of food products. Member states are only obliged to inform the EU Commission of their monitoring activities. European food policy tends to place responsibility for food control on the industry. For this, food safety warning systems have been developed and implemented to identify and control potential hazards. These systems focus on preventive control rather than food safety control during production. Consequently, the functions of national authorities are only to verify the implementation and monitor the application of appropriate systems. EU food legislation. Consumer information legislation. Food safety legislation. Legal requirements for product quality. The general principles of EU legislation in food and agricultural product safety were revised and introduced on January 28, 2002. Control and monitoring occur at all stages of the food production chain - “from farm to table.” Legislation-defining principles and common control instruments are supported by the European Food Safety Authority, an organization that provides scientific and technical support to implement the principles of legislation. Regulation 178/2002 / EC of the European Parliament and of the Council of 28 January 2002, laying forth the broad principles and requirements of food law,

establishing the European Food Safety Authority, and laying out processes for food safety, is the most important EU legislation in this area. The regulation of January 28, 2002, applies to all EU countries. "To provide the foundation for a high level of protection of human health and consumer interests in the food sectors, taking into account the diversity of the spectrum of food items," according to the decree. " This generalization was a prerequisite for the creation of a solid scientific basis and an effective organizational structure. Based on this regulation, a European Food Safety Authority was established. The regulation should ensure the free circulation of safe and high-quality food products, the health and well-being of citizens, the realization of their social and economic interests, and a high degree of protection of people's life and health. The Regulation provides for the harmonization of principles and procedures to create a common basis for adopting measures in food and feed products in the individual Member States and at a Community level. The regulation covers all stages of the food production chain. The EU member states have not adopted all the principles and procedures established by the Regulation until January 1, 2007. The principle of general requirements of food legislation is important. Dangerous food must not be placed on the market. Dangerous products are products that are harmful to health and/or unsuitable for use. When determining whether a food is hazardous, consider the usual conditions of use, the information provided to consumers, direct or direct effects on health, general toxic effects, and the specific category of consumers depending on the state of health. If a hazardous food product is included in a consignment, then the entire consignment will be considered hazardous. Placing on the market or feeding animals with unsafe feed is prohibited. If feed has a negative impact on the health of animals or humans, it is called hazardous. If a portion of the feed does not fulfill the requirements, the entire batch is considered dangerous. Workers (enterprise operators) must guarantee that food laws are followed at all stages of the food chain. Food, feed, and any other elements that make up a food product should be traceable at all phases of manufacturing, preparation, and transportation. For this purpose, workers in the production chain

apply special systems and procedures. The Regulation establishes special provisions regarding traceability (applicable from 1 January 2005). The essence of a product traceability system is “tracing,” which provides the ability to trace the movement, location, and origin of food, animals, and animal components intended for use as food at all stages of production, processing, and distribution. In case of signs of a threat to human health by food, the competent authorities may decide to implement corrective risk management measures. Importers must indicate the exporting company from which the product was purchased in the country of origin. A worker in the production chain who discovers that a food or feed product imported, manufactured, processed, or placed in the trade network is harmful to human and animal health should take immediate measures to withdraw the product from the trade network and report to the competent authority. To ensure an appropriate level of health protection in the Community, the principle of preserving the environment has been introduced, and thus restrictions on the free circulation of food and feed products have been introduced. The European Food Safety Authority (EFSA) was established on January 28, 2002, by Decision No. 178/2002 of the European Parliament and the Council of Europe, which "must provide scientific advice and scientific and technical support to community legislation and policies in all areas of activity that have a direct or indirect impact on food and feed safety." He should offer unbiased information on all concerns relating to these areas of operation, as well as share risk information. This body should contribute to achieving a high degree of protection for human life and health, taking into account the health and condition of animals and plants in the context of the internal market's functioning. EFSA is also tasked with establishing a network for the Rapid Notification System for Food and Feed (RASFF), a tool for exchanging information on measures taken to ensure food safety. The network includes the control authorities of the EU and EU member states. In addition, EFSA must collect and analyze data to characterize and monitor risks that directly or indirectly impact food and feed safety. The structure of the EFSA Safety Authority includes: - Executive Board - Executive Director and

Staff - Advisory Council - Scientific Committee and Scientific Bodies The Safety Authority began its work on January 1, 2002. The hazard can be caused, for example, by pesticides. These substances must go through an approval process (directive 91/414 / EC). The approval process for plant protection products is handled separately by each EU country. Only plant protection products may be used whose active ingredients are listed in addition to Directive 91/414 / EC. The Regulation of the European Parliament and of the Council No. 852/2004 "On the cleanliness of food products," which came into force on January 1, 2006, is the highest legal act in this domain. Directive 89/397/EC of the European Communities, dated 14.06.1989, establishing government control over food items. It establishes broad guidelines for government regulation of food, food additives, vitamins, mineral salts, and objects that come into contact with food. Member states must be concerned, according to the directive, that food goods intended for another country's market are subjected to the same inspection as those destined for their own. The labeling includes a list and quantity of some ingredients and categories of ingredients (given in descending order of concentration). In addition, all the substances that make up the individual ingredients are listed. A mandatory element is the allocation of minimum shelf life or end date of consumption for food products that are not resistant to microbiological spoilage; description of special storage conditions or conditions of consumption. It is envisaged in the labeling to indicate the name of the company and the address of the manufacturer, the company that carries out the packaging, or the seller, whose representative office is located in the EU country. All information on the label must be legible and placed to be visible and impossible to remove.

CHAPTER III. METHODOLOGY AND ANALYSIS OF FOOD EXPORT AND FOOD PRODUCTION IN THE CASE OF AZERBAIJAN

3.1. Research Methodology and Survey

The development of the agricultural market consists of seven priorities, the primary purpose of which is to facilitate the work of agricultural workers in obtaining specific resources. These measures reflect seven priorities, the first of which is developing the land market in the country. The second priority is to improve the irrigation system and facilitate access to it. The third priority is to provide manufacturers with various types of machinery and equipment, techniques that will enhance production. The fourth priority is to develop the seed and seedling market and at the same time work to strengthen local production. The fifth priority is to improve crop protection and fertilizer supply in agriculture. The sixth is the provision of naturally regulated feed to animals and the development of breeding. It is the development of the seventh veterinary. Now let us look at the priorities listed above, which play a vital role in developing the market for agricultural inputs, which is a food security grant (Strategic Road Map for the production and processing of agricultural products in the Republic of Azerbaijan, Baku-2016, p. 87). Development of the land market. As land is the primary means of agricultural production, it is crucial to improve the access of agricultural producers to this production enterprise and the efficient use of land resources to stimulate the production of agricultural products in general. The advantages of households with small plots of land in the country are the main factors that seriously hamper the sector's competitiveness (Siemen van Berkum, 2017). Despite the recent work in this direction, there are several problems with the non-use of some agricultural lands. There are several measures to address the problems: 40 - Simplify the procedure for selling, leasing, and putting agricultural land into operation; - Application of appropriate mechanisms to prevent unused agricultural lands; - Take measures to get more crops from the land. - Thanks to the Strategic Roadmap for the processing and production of agricultural products, the purchase and sale of agricultural land will be facilitated, and unused land will be registered and

distributed to entrepreneurs, which will increase the area under crops by 5%. (Guliyev E., 2015) When talking about land market development, it is also essential to conduct a land assessment. The cadastral value of land is calculated by rental income, which varies under many factors. These factors depend on climatic conditions, development of the agricultural sector, transport, and roads, land cover conditions, proximity of exploited lands to the production market and main transport routes, rested lands, hayfields, plowing. Land prices are formed based on cadastral prices. Although there have been many attempts to improve the country's demand for irrigation water, there are still problems in this area. Given that much of the country's agriculture is irrigated, improving irrigation water for irrigation could increase production and productivity in this area. There are several measures to be taken to solve the problems: - Study of the demand for irrigation water; - Development of modern irrigation system; - Expanding the activities of all workers using water in agriculture and providing financial incentives for the water they use. Studying the water requirements of cultivated plants during irrigation also avoids additional costs in this area. All these measures show that the supply of irrigation water to agricultural producers will be increased by 20 percent (Allahverdiyev E., 2012).

They were providing various types of machinery and equipment, techniques that would enhance production. As a result of systematic measures to improve the supply of agricultural products with appropriate machinery and equipment, the agricultural machinery fleet has been radically renewed and expanded. At present, there are some issues related to the development of the market of agricultural machinery and equipment with appropriate machinery and equipment: - Feasibility study for the continuation of state support measures to replace obsolete technologies with new ones; - a study of opportunities for physical and spiritual renewal and expansion of the technopark in all areas of agriculture (cotton, potatoes, vegetables, sugar beet, and other areas) following the productivity of the sown area and potential structural changes; - preparation for a feasibility study for the supply of machinery and equipment, taking into account the unique needs of small and medium

enterprises; - expansion of the business network of individual suppliers of agricultural services in order to increase competition and quality in the field of agricultural services. There are some measures to be taken to solve the problems: strengthening technical support in agriculture; increasing the supply of innovative and small-sized machines, machines, and equipment. As a result, the necessary technical equipment for agriculture will be developed and replaced with new ones. The infrastructure of agricultural machinery will be maintained. It will provide manufacturers with innovative as well as small-scale machines and equipment. The supply of agricultural producers with machinery and equipment and small-scale machinery and equipment will increase by 20 percent, and new equipment will increase. These measures can have some negative consequences. Potential problems in a competitive environment can negatively affect the structure of markets. The inability of farmers to use modern machinery, equipment, and machinery can hinder the development of the agricultural market (Quliyev E., 2015). Seed and seedling market development. The seed and seedling market in Azerbaijan is currently developing, and it is crucial to develop this market, which provides producers with good seedlings and seeds. High-quality seeds and seedlings are costly for small farmers, so most farmers grow them on their farms to meet their needs for seeds and seedlings next season.

It should be noted that the quality of seeds and seedlings available to farmers is limited. At present, most of the textile demand in the country is covered by imports, and the majority of existing seed producers are mainly engaged in the production of grain seeds. There are several measures to be taken to solve the problems: - Development of seed and seedling production; - Establishment of the quality control system and certification mechanism in seed and seed production; - Increasing the efficiency of seed laboratories. As a result, a unified certification system for agriculture will be created in this area. An electronic database will be created for producers, and a unified quality management system will be created. Seed laboratories will be accredited, and the use of certified seedlings and seeds by

agricultural producers will reach 90% (Seyidaliyev N.Y., 2014). Improving crop protection and fertilizer supply in agriculture. Currently, the actual amount of mineral fertilizers applied to crops is significantly less than the current demand. For example, according to the Ministry of Agriculture, the demand for fertilizers in 2016 was 948.9 thousand tons, and only 154.8 thousand tons of fertilizers were imported into the country. It seems that in 2016, mineral fertilizers imported only 16.1 percent of the country's needs. According to the latest FAO statistics, Azerbaijan is among the countries with the lowest levels of mineral fertilizers per hectare. Limited use of plant protection products and fertilizers ultimately leads to increased losses in crop production and reduced productivity. The following measures are taken to solve these problems: - Determining the demand for fertilizers; - Encouraging the use of fertilizers; - Improving the tools needed for plant protection; - Strengthening the quality control of plant protection products and fertilizers; - Promotion of local production in fertilizer production.

As a result, high-quality fertilizers and plant protection products (including biological fertilizers and herbal medicines) will be expanded to increase agricultural productivity. Thus, the use of mineral fertilizers by agricultural producers is expected to increase by 25 percent, plant protection products by 25 percent, biological fertilizers by 10 percent, and biological plant protection by more than 10 percent (Jabrayil A., 2015). Provision of animals with natural regulated feed, development of breeding. In recent years, the development of livestock in the country has led to an increase in the cost of feeding them, the amount of feed, and water. Despite some work done in this area, there are many problems. There is a need for intensive development measures to develop livestock in the country, to improve the sex composition. Currently, the Republic of Azerbaijan's strategic roadmap for agriculture products manufacturing and processing is taking steps to address these issues. - Study of the structure of the feed market and the development of this area; - Prolongation of the use of Artificial Fermentation and Embryo Transfer Method; - Supporting the development of breeding poultry. As a result, a

strong fodder market will be created to develop livestock, and the composition of animals will improve. The nutritional potential of livestock will increase by 20 percent, and the number of productive breeds in livestock will increase by 25 percent. Extensive livestock development in Azerbaijan is one of the biggest problems. Extensive development means increasing the number of livestock. Due to the small territory of Azerbaijan, development in this way is not expedient. It is not suitable for livestock to develop, as there is less arable land per capita. There is no need to increase the number of animals in Azerbaijan every year. Because there are significant problems both in terms of land and feeding of growing animals. Recently, more attention has been paid to intensive development. Intensive development is economic development achieved by increasing the efficiency of using existing resources without the involvement of additional resources. A legal framework has been created for this. After the Republic of Azerbaijan's legislation was amended and put into effect, livestock production increased dramatically. Measures to improve 46 types of cattle have been successfully sustained in accordance with the State Program for Socio-Economic Development of the Regions. In addition, livestock solves many global problems. In many rural areas, livestock provides income for more than 500 million people. After that, product residues and several by-products will quickly become an environmental issue when not consumed by livestock. The Republic of Azerbaijan's strategic roadmap for agricultural product manufacturing and processing is now taking many steps to address these issues. Study of the fodder market structure and development of this field - Extension of the use of Artificial Fermentation and Embryo Transfer Method - Supporting the development of breeding poultry. As a result, a strong fodder market will be created for livestock development, and animal composition will improve. The nutritional potential of livestock will increase by 20 percent, and the number of productive breeds in livestock will increase by 25 percent (Zeynalov M., 2005).

As part of the country's development of veterinary and phytosanitary services, standards have been updated, laboratories have been updated, and measures have

been taken to strengthen institutional capacity in cooperation with international organizations. At the same time, it is necessary to provide producers with practical veterinary and phytosanitary services, ensure their development following international standards, accelerate reforms in plant protection services, and develop individual veterinary networks and other areas. Appropriate measures are being taken for this (http://www.dfnx.gov.az/).

Develop a particular veterinary network; Establish an effective system for monitoring and controlling animal health; - Take systematic measures to ensure plant health. The risk management system for animal and plant diseases will be brought in line with international standards. The network of 47 special veterinary and plant protection services will be expanded, and the number of specialized veterinary services will increase by 30 percent. All of the above are the problems of the current agriculture and the agricultural market and ways to solve them. According to the State Statistics Committee, Azerbaijan established itself in 2015 with food products, as shown in the table below. The main goal of food security is to provide the population with necessary, environmentally friendly food products. One of the most global challenges facing humanity is food security. Grain production is of special importance in solving this problem. In world practice, the country's reserves are considered safe if they have more than 17-20% of its annual grain consumption. The main goal is to ensure that the country's food security reaches 120%. One of the main tasks is to reduce imports into the country by increasing local food. Azerbaijan is not only able to provide itself with 120% of grain, but even this figure does not reach 100%. At present, Azerbaijan is 60-70% self-sufficient in grain, which is a very low indicator of food security (Abbasov D, 2011).

The research design applied in the thesis is quantitative. The study is dedicated to a specific behavior that occurred at a specific moment. It comprises the following independent factors: *GOVERNMENT* which defines the role of government in promoting food export in the agricultural sector of Azerbaijan economy, *CREDITS*

variable relates to the role of the banking sector and related question that defines the impact of it on the promotion of export of food products. The *LOGISTIC* independent variables describe the impact of transportation on the export promotion of food in the agricultural sector. The INFRASTRUCTURE independent variable defines the influence of infrastructure on the export of food products in the agricultural sector of Azerbaijan.

The EXPORT variable was chosen as the dependent variable in the study. All the variables were defined by three questions and were transformed to conduct further regression analysis.

The research sampled farmers operating in Azerbaijan and who were interested in exporting their agricultural products. In the study, in total, 92 respondent farmers participated. The survey was done in a hybrid style, with the questionnaire distributed both online and face-to-face.

Likert-scale questionnaire surveys were used in the research, consisting of 7 different answers *(Strongly Disagree-1, Disagree-2, Somewhat disagree-3 Neutral-4, Somewhat agree-5, Agree-6, Strongly Agree-7).* The questionnaire relates to factors defining independent and dependent variables.

3.2. Hypothesis

The following hypothesizes were tested:

H1: The Government supports positively impacts on the export of food in the agricultural sector of Azerbaijan;

H2: There is a positive relationship between logistics and the export of food in the agricultural sector of Azerbaijan;

H3: There is a positive relationship between cheap credits and the export of food in the agricultural sector of Azerbaijan;

H4: There is a positive relationship between infrastructure and the export of food in the agricultural sector of Azerbaijan.

3.3. Reliability analysis

The SPSS software was used to perfume the analysis. Cronbach's Alpha was employed to determine the reliability of the questionnaire-derived variables. It examined solely ordinal factors, transformed them into scale factors and combined to produce dependent and independent variables. Demographic factors were omitted from the reliability analysis since they had no direct effect on the dependent variable. The test result is 0.906, which is more than the 0.7 thresholds established by (Nunnally, 1978)

Table 1: Reliability Test

Cronbach's Alpha	N of Items
0.906	15

Source: The table was developed by the author based on the SPSS program.

3.4. Correlation and Descriptive Analysis

The descriptive analysis was performed to understand the nature of the data to define the methodology based on the nature of the data.

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
EXPORT	92	1.00	6.00	2.3841	1.41156	.876	.251	-.257	.498
INFRASTRUCTURE	92	1.00	7.00	3.6594	1.77898	.055	.251	-.989	.498
GOVERNMENT	92	1.00	5.75	2.4293	1.14794	.617	.251	-.135	.498
CREDITS	92	1.00	6.00	1.9819	1.31894	1.486	.251	1.487	.498
LOSGISTIC	92	1.00	7.00	2.4130	1.47620	1.012	.251	.244	.498
Valid N (listwise)	92								

Source: The table was developed by the author based on the SPSS program.

The Z values for Skewness and Kurtosis can be used to determine if the data is symmetric or asymmetric, normal or non-normal. Skewness values between 3 and + 3 are considered acceptable when using structural equation modeling, however, kurtosis values between 10 and + 10 are considered acceptable (Brown 2006). According to numerous sources, asymmetry and kurtosis values between -2 and +2 are considered appropriate for generating the normal univariate distribution (George and Mallery, 2010). By examining the table of descriptive statistics findings for skewness and kurtosis z values, it is simple to deduce that the study data are neither symmetrical or regularly distributed. The research employed a nonparametric approach due to the non-normal distribution of the data collected.

In contrast to Pearson's correlation, Spearman's correlation quantifies the strength and direction of the monotonic relationship between two variables rather than the linear relationship.

Table 3: Correlations Matrix

			EXPORT	INFRASTRUCTURE	GOVERNMENT	CREDITS	LOSGISTIC
Spearman's rho	EXPORT	Correlation Coefficient	1.000	.684**	.632**	.671**	.912**
		Sig. (2-tailed)	.	.000	.000	.000	.000
		N	92	92	92	92	92
	INFRASTRUCTURE	Correlation Coefficient	.684**	1.000	.675**	.530**	.616**
		Sig. (2-tailed)	.000	.	.000	.000	.000
		N	92	92	92	92	92
	GOVERNMENT	Correlation Coefficient	.632**	.675**	1.000	.465**	.521**
		Sig. (2-tailed)	.000	.000	.	.000	.000
		N	92	92	92	92	92
	CREDITS	Correlation Coefficient	.671**	.530**	.465**	1.000	.576**
		Sig. (2-tailed)	.000	.000	.000	.	.000
		N	92	92	92	92	92
	LOSGISTIC	Correlation Coefficient	.912**	.616**	.521**	.576**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.
		N	92	92	92	92	92

**. Correlation is significant at the 0.01 level (2-tailed).

Source: The table was developed by the author based on the SPSS program.

Following the Spearman nonparametric correlation result, it was found that there is a positive monotonic relationship EXPORT and other independent variables, which confirms the hypothesis of the research. The correlation ratio is above 0.5, which is according to (Cohen, 1988), confirms a strong correlation among the variables.

3.5. Multiple Regression with Bootstrap

Due to the nonparametric nature of the study data, bootstrapping regression analysis was employed to analyze the relationships between dependent and independent variables. According to Bootstrap, a comprehensive approach for statistical inference that relies on resampling to create a sampling distribution for a statistic (Wehrens, Putter, and Buydens, 2000), (Həsənli,2008). It is capable of producing proper answers in cases where alternative approaches are either unavailable or insufficient.

The summary results of the model demonstrate how effectively our independent variables explain for the dependent variable. Our independent variables and R square adequately describe our dependent variable. It serves as an excellent indicator of the model's quality.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.937[a]	.878	.872	.50459	.878	156.283	4	87	.000

a. Predictors: (Constant), LOSGISTIC, CREDITS, GOVERNMENT, INFRASTRUCTURE

Source: The table was developed by the author based on the SPSS program.

The R square score in this study is 0.878, which indicates that 87.8 percent of the data matched the regression model. The remaining 12.2 percent is explained by variables outside the scope of this study and should be explored in future research. In general, we can infer that independent thesis components adequately explain the dependent variable EXPORT and that the model is robust at 87.8 percent. F value exceeds 5, and the impact is significant at 0.05 or =5%,

Table 5: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	159.167	4	39.792	156.283	.000[b]
	Residual	22.151	87	.255		
	Total	181.319	91			

a. Dependent Variable: EXPORT

b. Predictors: (Constant), LOSGISTIC, CREDITS, GOVERNMENT, INFRASTRUCTURE

Source: The table was developed by the author based on the SPSS program.

All independent factors have an impact on dependent variables, according to the ANOVA findings, since the F value is more than 5 (F=156.283***), which is deemed significant.

According to the results of Bootstrapping multiple regression, an independent variable with a high beta value (B) contributes a lot for the dependent variable compared to other variables having less beta value. Based on the regression results it is possible to conclude that all independent variables are significant and positive with 5%, only INFRASTRUCTURE variable found not significant in the model despite of the fact of positive direction of the impact.

Table 6: Multiple regression with Bootstrap

Model		B	Bootstrap[a]				
			Bias	Std. Error	Sig. (2-tailed)	BCa 95% Confidence Interval	
						Lower	Upper
1	(Constant)	-.216	.004	.114	.061	-.446	.018
	INFRASTRUCTURE	.017	-.001	.044	.729	-.072	.101
	GOVERNMENT	.202	.000	.076	.010	.062	.352
	CREDITS	.158	-.002	.059	.015	.025	.274
	LOSGISTIC	.719	.002	.058	.000	.610	.838

a. Unless otherwise noted, bootstrap results are based on 2000 bootstrap samples

Source: The table was developed by the author based on the SPSS program.

Based on the result, the Bootstrapping multiple regression model can be constructed as follow:

$$y = b_0 + b_1x_1 + b_2x_2 + \ldots + b_nx_n + u.$$

where,

*YExport=0.216**+0.017INFRASTRUCTURE+0.202GOVERNMENT***+0.158CREDITS***0.719LOGISTICS****

Based on the result and model, we can conclude that a 1% increase in government support causes a 20.2% increase in export, and a 1% increase in the amount of cheap credits causes a 15.8% rise in food export. Finally, the 1 percent increase in Logistics rises export by 72.9%. Variable infrastructure found not significant in the model.

CONCLUSION

The main goal of food security is to free it from foreign dependence, imports. One of the main tasks is to reduce import costs and increase the supply of necessary food resources by reducing dependence on imports of some products. According to the State Statistics Committee, Russia is a leading exporter of 10 primary goods imported to Azerbaijan, which account for about 37% of demand in Azerbaijan. In addition, more than half of cigarettes, more than 50 percent of wheat and wheat flour (a mixture of wheat and rye) are imported from Azerbaijan. Seven percent of the country's demand for ten essential food products is mainly covered by foreign countries, which means that Azerbaijan can produce and import these products, as the region has a similar climate and business environment with other countries. In 2016, Azerbaijan imported $ 126.1 million worth of durum wheat, $ 179.7 million worth of soft wheat and wheat flour, and $ 31.2 million worth of corn. Azerbaijan is less competitive in producing these products because the economic areas in which these products are grown in the country are small, and it should be noted that the agro-technical standards in this sector are not encouraging. In 2016, cigarettes worth $ 297.2 million were imported to Azerbaijan. Currently, tobacco production is underdeveloped, but given the significant turnover of tobacco imports ($ 4.4 billion) in the domestic and regional markets, it can be said that there is significant market potential to increase the production of this traditional product. In 2016, Azerbaijan imported $ 70.3 million worth of plant products, but the country has a significant export turnover. In 2016, vegetable oil was exported for $ 60.9 million, of which 56.5% was sunflower oil. As Azerbaijan is competitive in the export of vegetable oil, especially sunflower, there are substantial opportunities to reduce dependence on imports of these products. Due to the small number of milk processing plants in Azerbaijan 49 and the lack of natural milk required for production, large amounts of milk are imported. By increasing the production capacity of natural dairy raw materials, there are potential to grow the scale and activity of current processing plants, as well as boost the production of dairy products that fulfill quality and

market standards. Fresh meat (beef, poultry, and lamb) is the most extensively produced and valued animal product in Azerbaijan. This product, on the other hand, does not match the needs of the local market, and exports are minimal. Azerbaijan exports mostly canned and processed beef. Given that current processing plants in Azerbaijan fulfill modern requirements and have great productivity in this field, as well as a much higher demand for meat products, it is conceivable to expand their scale and operations. Processed agricultural products of Azerbaijan dominate this sector. Establishing agro-processing enterprises in Azerbaijan can reduce dependence on certain products, such as tobacco, dairy, and flour products, and, accordingly, the trade deficit can be reduced (https://mida.gov.az/documents/strateji_yol_xeritesi_kend_teserrufati_mehsullari). Based on the results, several import-substituting processed products and agricultural products in Azerbaijan are grouped as follows. - cereals: corn, wheat.; - livestock products: poultry, meat, milk; - industrial products: cotton, cocoons, sugar beet, tobacco, tea, wool, leather, medicinal plants. In the medium term, it is planned to increase industrial goods' processing to replace imports. Thus, to achieve the priority goal, priority products will be identified for each group of agricultural products to be replaced, and measures will be taken to strengthen production and processing enterprises. Azerbaijan is taking some measures to reduce imports for food security (Mammadli, 2020). These measures are as follows:

1) Creation and development of a large livestock complex. In order to reduce the development and import of livestock products in Azerbaijan, intensive development of production in the livestock sector, development of large cattle complexes operating indoors to increase productivity, and creation of informative information in this field are provided. At the same time, stimulating measures will be taken in agrophysics, livestock complexes will support the breeding of high-yielding breeds through agro-leasing, and work will be done to expand artificial insemination as a critical factor in intensifying livestock. (Qurbanzadə A., 2017)

2) To apply the experience of the pilot project on the establishment of livestock and dairy farms in Imishli, Barda, and Agjabadi districts. Given the importance of increasing the capacity of family farms to reduce their dependence on livestock imports, the expansion of the dairy and livestock sectors and the development of experience will be supported. For this purpose, the pilot project implemented in some regions of Azerbaijan (Barda, Imishli, and Agjabadi) will be implemented in other regions (http://www.qebele-ih.gov.az/page/56.html).

3) Expansion of industrial poultry production in various segments. In this context, additional measures will be taken to support broiler farms, and this sector's development mechanism will be assessed. Plans will be drawn up for large-scale poultry production to stimulate the production of late-maturing poultry, the development of poultry farming, and the production of various population groups and the processing industry. This area is vital for food security.

Poultry plays an essential role in meeting the growing needs of the population. This sector guarantees the acquisition of the product at a lower cost and time. Of course, there are some disadvantages of this method, the most important of which are the use of hormones for the rapid growth of birds and the injection of drugs that have a negative effect on the human body. In the best case, they use frozen water to gain more kilograms of meat. All this undermines people's confidence in poultry. Although a number of agencies are fighting against it, it has not been possible to prevent it entirely. All of these have a negative effect on eggs, as well as on poultry.

4) Support for expanding small and medium enterprises for meat and dairy processing in the regions. The aim is to take full advantage of the production capacity of family farms and other small farms, and support mechanisms will be developed to establish a network of small meat and dairy processing enterprises at the district level. In addition, such measures help reduce urbanization. Sending homeless people to unused land allows them to farm and solve the problems of unemployment, housing, and labor shortages (Vəliyev A., 2011).

5) Increasing the production of sugar beet and sugar products in the country This event will assess the opportunities to increase the production of local raw materials and sugar confectionery. The surveys cover the country's territory, production structure, agricultural productivity. Such indicators will be analyzed to assess the economic efficiency of the domestic production of sugar beet. Based on the analysis results, development plans will be prepared to ensure the production of sugar confectionery at the expense of local raw materials. Although the processing of this sector is at a reasonable level, it should be taken into account that this processing is due to imports.

6) Development of beekeeping, fisheries, and fisheries and measures to stimulate producers in these areas. Increasing the productive potential of agriculture and other small farms, increasing employment in rural areas, increasing the income of the population, as well as increasing the share of local production in beekeeping, providing fish products and other irrigated biological resources in the country, beekeeping, and fishing, especially fisheries development will be stimulated. Various development plans will be developed to support farms that want to be involved in their activities.

7) Increasing the production of hard and soft wheat and grain legumes. Intensive development of the grain sector in these areas will focus on appropriate measures to increase the production of soft wheat and other grains, achieve development with modern technologies without increasing the number of areas and increase productivity. In addition, opportunities for establishing pasta and other production facilities in this sector in specially designated areas will be explored, and development plans will be developed. In addition, the development of market infrastructure will consider the creation of small and medium-sized packaging. As noted, the primary food security grant is grain. As stated in the topic, a country that cannot produce 20% more than its annual planned grain production cannot be considered a food-safe country. Intensive development is significant in this area. Because grain is a fruit-bearing crop every year, this leads to the annual heating of

the soil, which leads to desertification and salinization. It is necessary to use modern combined harvesters during land reclamation, installation of drainage systems, and grain harvesting that meet modern standards (https://www.meliorator.az/?s=30).

8) Increasing local production of raw materials necessary for the production of vegetable oils. First, the existing potential to increase the local production of oilseeds used in vegetable oils will be explored. The country will assess the economic efficiency of corn, sunflower olives, and other products, and in this regard, especially in arid areas of the country, will be offered opportunities for the production of olive fruit and other olive oil (Abbasov D., 2013).

9) Stimulating the expansion of tea plantations. The event will research the country's needs for local tea products and compare local products with price, quality, and 54 other similar products. The best indicators for expanding tea plantations will be chosen based on the analysis' findings, and corresponding development strategies will be developed.

10) Stimulation of increasing the production of tobacco products. As part of this event, opportunities to increase the production of local raw materials and tobacco products will be assessed. The study will assess the economic efficiency of local tobacco products based on the analysis of various economic indicators by regions of the country, determine the production of tobacco products based on the local raw material base or import of raw materials, and develop and implement development plans.

11) Processing of cocoons, leather, wool, cotton, raw materials, and the development of industry in this area. According to the rules for the event, a set of special tools and incentives for key products will be developed. This package includes more effective tools and support mechanisms from the state based on identifying more suitable areas for crops and livestock. In particular, special development programs will be developed to create a network of horticultural and wool enterprises at the district and village levels to take full advantage of the productive potential of family-rural and small farms.

Thanks to the measures taken or to be taken to promote the increase of production of agricultural processing industry and agricultural products, which can replace imports, production indicators are expected to develop in the following form. - 11% reduction of the number of cattle, 19% increase of meat production, 50% increase of milk purchasing power, and 30% increase of milk production due to intensive development farm model; - 25 percent increase in the production of meat and dairy products in the processing industry; - increase of productivity and quality indicators of wheat production due to growth; - 50% reduction in imports of tobacco products; - doubling of tea growing areas; - to increase the volume of production in the areas for cocoon production and its processing up to 1000 times, - to achieve a 4-fold increase in production in the field of cotton production and processing. Of course, all this carries risks, the most important of which is the change in the geopolitical situation in the region, which is a risk in all areas of agriculture, and climate change has an adverse effect on development and even implementation of such measures (Федоренко, 2017). The challenges with agriculture and agricultural products manufacturing, as well as their solutions, are noted here. In general, the weaknesses, strengths, opportunities, and threats in the production and processing of agricultural products in Azerbaijan are listed below. The strengths of the production and processing of agricultural products are as follows: - The existing natural resources (land, water, climate resources) are suitable for the development of agriculture in the country; - Formation of market-based agricultural policy based on the principles and traditions of the private economy; - Creation of a new system of processing industry based on new technologies; - Agriculture and food production have a faster rate of growth than the rest of the world; - Steps were taken by the state to increase the level of food self-sufficiency after the country gained independence; - Observation of growth in the expansion of exports due to the development of agricultural production; - Strong state support for agricultural workers inappropriate means of production;

- Establishment of state-sponsored measures to boost intensive agricultural and livestock output; -Establishment of modern agriculture, with the establishment of agricultural facilities and the gradual extension of experience in this field based on this foundation; -Access to foreign markets (Azerbaijan is near to the Russian market and has access to markets in the Middle East and Europe); - Availability of better developed rural infrastructure. There are weaknesses in the processing and production of agricultural products, which are: - weak experience in the application of advanced farming methods, the role of intensive rather than extensive development in the growth of production of many products, low productivity; - Insufficient irrigation system and water supply in the fields; - The advantage of small-scale family farms and the fact that these farms are often not market-oriented; - Insufficient development of market infrastructure, including warehousing and sales infrastructure; - strong enough use of available resources to increase the value added created in both processing, production and trade of products; - that supply-orientedness in agrarian policy is greater than demand-oriented, and that this policy needs to be improved on the basis of a "value chain" approach in general; weak cooperation in the field of agriculture and farming, including the integration of agro-industry; - weak activity of processing enterprises in local sources of raw materials; - access of agricultural workers to financial resources and weak insurance in agriculture; - low level of knowledge and skills in relevant fields for farmers to carry out their work in an advanced way; - production of agricultural products and irrational use of resources without taking into account the environment; - underdevelopment of consulting services and information base in the field of agriculture; - Incomplete establishment of electronic agricultural services, land, animal identification system and state registration system in agriculture; - Weak competitiveness of production of wheat, which is a strategically important food product, and high level of imports; - non-compliance of food quality indicators with food safety standards. - Weak practice and work to solve problems in agriculture. The opportunities of agriculture in Azerbaijan are as follows: - The country's

agriculture, its processing, development of production, social and economic progress in this area is one of the main priorities; - providing financial assistance to the state to increase agricultural and food production; - development of infrastructure of agricultural and food market and establishment of market regulation system; - strengthening exports to increase its prestige in the world market; - Proximity to the export market due to its geographical location; - weak experience in the application of advanced farming methods, the role of intensive rather than extensive development in the growth of production of many products, low productivity; - commencement of multifaceted incentives to strengthen its position in export markets; - wide range of production of many agricultural products; - availability of conditions for the production of environmentally friendly products; - large labor force, cheap labor and low costs; - As a result of the devaluation of the manat, domestically produced products are cheaper on the world market, ie they are competitive. This is because local products are cheaper than foreign currency, and prices are more favorable for consumers. It can be seen from the opportunities mentioned above that the main priority in the development of agriculture is to increase exports. Since gaining independence, Azerbaijan has always developed this sector and made large investments. The volume of food exports and agriculture in Azerbaijan increased 11.1 times in 2001-2015 and 2.2 times in 2005-2015. In 2001, extensive reforms were introduced in this area, the main goal of which was to restore the economy and agriculture, which had collapsed after the collapse of the USSR. Exports of agricultural products increased by 8.5 times and 1.6 times in certain periods, and processed agricultural products increased by 14.7 times and 3.0 times, respectively. According to the United Nations, the share of Azerbaijan in global exports of agricultural and food products increased from 0.015% to 0.53% in 2001-2015. However, the reduction in processing and production in recent years has had a negative impact on exports. 56% of the exported products are processed, and 44% are agricultural. It can be concluded that most fruit and vegetable trade has a high balance. Russia is the main market for agricultural products produced and processed

in Azerbaijan. Azerbaijan's agricultural market exports at most three main products to other countries: tomatoes (greenhouse tomatoes), fresh cucumbers (gherkins), and fruits (apples, hazelnuts, dates, pomegranates, melons). The country has great competition for these products, and in a short time, it can significantly increase the productivity and production of products. In addition to products, three main agricultural sectors in Azerbaijan dominate exports: fruit and vegetable production and processing and wine industry products with high comparative advantages, sugar and sugar products based on imported raw materials, vegetable oils and tea products, tobacco, cotton, and industrial raw materials leather products. It is necessary to note the positive, negative, and opportunities of agriculture. It should be borne in mind that this work carries a certain risk. Possible risks in agriculture are as follows: - scarcity of natural resources in the country (land and water resources) Although this indicator is favorable in Azerbaijan, it is lower than in other countries; - protection of the environment and proper use of natural resources during agrarian policy; - limited geographical diversification in export markets; - the problem of desertification due to improper irrigation, improper use of drainage and land reclamation; - unfair competition in the domestic market, import of dumped products from foreign countries; It is important to study the ways to ensure food security in our country, its problems, and solutions. It is from this sector that people receive the necessary food and live a healthy life. As noted, food security is ambiguous. One of them is the self-sufficiency of each country in food, and the other is the environmental safety of the products, products without additives (GMO-free) that can adversely affect the human body. According to the accepted norm, if a state can produce more than 80% of the necessary food products within the country, it is considered a safe country. The lifestyle of the population, the level of poverty, hunger are partially controlled in this sector. Because a country where food is dangerous, a country that cannot provide itself with the necessary food for life cannot be considered a developed country. Compared to other countries, Azerbaijan should be close to this indicator in food security, although not one hundred percent

(Eyyubova, 2014). The main reason was that we lived in a state of war. However, the question may arise as to what connects them. If a war breaks out and the country is under an economic blockade, then imported products will not enter the country, and Azerbaijan will meet all its needs. Therefore, it can be concluded that the state's main goal is to reduce imports and replace them with local products. The main proposal to ensure food security is agriculture. This policy is related to agriculture. Several proposals have been put forward for the development of this sector, the most important of which are: - Improving the irrigation system and facilitating access to it; - to provide agricultural workers with modern equipment; - Discounts and tax breaks for workers in this sector to obtain the necessary materials. All this is important to stimulate agriculture. Because this work carries great risks. Climate change, insect attacks, and a lack of workers and equipment can lead to crop losses. Therefore, many people flock to the cities to earn money without risking it. The Buddha himself leads to the problems of urbanization. Another proposal is to develop agriculture instead of increasing the number of meat products. One of the factors affecting food security is livestock.

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List of tables