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## REQUIREMENTS OF THE EUROPEAN UNION FOR QUALITY INDICATORS IN FRUITS AND VEGETABLES

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### ABSTRACT

Quality is directly dependent on manufacturing facilities, level of technology, organization, logistical supply and sale. Improving of the product quality is a complex and many-sided process of great importance for the production efficiency.

In terms of market structures, Bulgaria needs to further change its agricultural policy to meet the common agricultural policy of the EU. This means that basic standards, product certification and their metrological parameters must be at a European level.

**Key words:** quality, standards, quality indicators, RU requirements.

Improving of the product quality is one of the main areas of development of technical progress. Achieving of high product quality is not only an economic and technical issue, but it has also a social aspect.

Quality is directly dependent on manufacturing facilities, level of technology, organization, logistical supply and sale. Improving of the product quality is a complex and many-sided process of great importance for the production efficiency.

Development of technical progress defines a new content of the problem of product quality. It became an economic problem reflecting the efficiency and competitiveness of products in the international market.

With the development of economic structures, quality assurance in the food industry and farm produce is now focusing on the increasing demand for food safety and more stringent quality requirements of consumers.

The sector for fresh agricultural produce is perceived comparatively well in terms of food safety due to consumer perception of fresh products as a **natural** and **safe**. But there is also concern about the presence of pesticides and the risk of infections and expectation that fresh produce would be processed under hygienic conditions.

Product quality is one of the most important factors for the progress of any organization, as quality assurance is essential not only to meet customer requirements but also to satisfy legislative provisions in the European market.

Under the current conditions of community development, product quality criteria are quick to change. Requirements for the aesthetic design of mass consumer goods are on a constant increase. There is a constant search for product quality determination indicators in view of defining of criteria for comprehensive evaluation of product quality.

The quality of each product is characterized by a complex structure and a great variety of parameters, many of which are important for the consumer. Therefore, product quality has to be evaluated comprehensively.

In conducting a comprehensive evaluation of product quality it is important how individual indicators reflecting the specifics of the consumer product value will be arranged. This is an important prerequisite for the proper assignment of the product to a certain level of quality.

For an objective evaluation of the level of product quality a system of indicators is required to reflect the real process of production and consumption of a particular product at the highest extent.

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Expansion of the European market and the inclusion of new producers raise the issue of certification of goods in a pressing way. Certification as activity enhances consumer confidence in products.

Standardization and certification are the key points in quality assurance of farm and food industry products. Difference in quality of products is one of the main barriers to Bulgarian export of fruits and vegetables to the EU.

Quality standards are applied throughout the distribution chain, with the exception of products intended for direct sale by farmers or products for processing. The standards include requirements for quality and size of products; labeling, packaging and presentation requirements.

Bulgaria is adopting and shall implement the EU legislation in the field of fresh and processed fruits and vegetables.

The traditionally known Bulgarian vegetables in the export markets have good quality, but there are appropriate conditions for handling, grading, cooling, packaging, storage and transport. This leads to deterioration of fruit and vegetable quality and makes their sale difficult.

The Common Agricultural Policy is the basis for relations between the EU member countries. Each country has its specifics in terms of farm produce. This places at disadvantage some of the member countries.

The European Commission and its farm bodies prepare regulatory documents with special attention. Most of these are recommendatory in nature and each EU member country adjusts its legislation in accordance with the EU requirements.

Regulatory documents have been prepared for many plant products in Bulgaria, but in many cases the EU documents are considered only for information purposes.

**The objective of this study is** to examine the legal framework of the EU and Bulgaria on trade in plant products.

**To achieve this objective the following tasks are being solved:**

1. Analysis of the legal framework of the EU and Bulgaria on trade in plant products.
2. Presentation of conclusions and guidelines on certain elements of the legal framework and on certain types of plant products.

#### **SUBJECT OF STUDY**

Subject of study is the nature of the legal framework for trade in fruits and vegetables.

The issue of food product quality is essential for food legislation. This requires constant analyses and adjustments to current legislation.

Food legislation in the EU is of recommendatory nature for individual countries. Each EU member country should adopt its own food legislation meeting the general requirements included in the EU regulatory framework, but also complying with the traditional food quality indicators and these imposed by the consumer.

Regulations in compliance with EU quality requirements were introduced for about 40% of the Bulgarian food products by the beginning of 2009. These are mostly standards for fresh fruits and vegetables, and fresh raw products for the food industry.

In terms of market structures, Bulgaria needs to further change its agricultural policy to comply with the Common Agricultural Policy. This means that basic standards, product certification and their metrological parameters shall be regulated at European level. The requirements in this area are focused on two main product groups:

- Products for which common harmonized standards were adopted;
- Products for which no harmonized standards have been prepared.

As a result, in recent years Bulgaria adopted laws of significant number and scope of laws with the purpose to implement them in the national market and apply them in the Community market.

Bulgaria pays special attention to harmonize its standards and technical codes with these of the EU, which is a prerequisite for a fuller use of opportunities for expanded access to the Community market.

The policy conducted by the EU in the field of agriculture is of importance to Bulgaria. In recent years up to 70% of the newly adopted directives are related to agriculture regulation. Therefore, the CAP occupies about 40% of all EU legislation. The huge number of regulatory documents and their continuous amendment is a strong obstacle to the application of the legislation governing the Common Agricultural Policy.

Standardization and certification are the key points in quality assurance of farm and food industry products. Difference in quality of products is one of the main barriers to Bulgarian export of fruits and vegetables to the EUS.

This should be accompanied by appropriate legislative solutions for the regulation of standardization at the same time, and in compliance with the provisions related to obligations of the authorities to enforce the protection of life and health of humans, animals and plantation, and the environment. The need to harmonize Bulgarian legislation with this of the EU makes it necessary to create legal prerequisites in Bulgaria to enable activities such as standardization, accreditation and certification to be organized and implemented on associative basis.

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The traditionally known Bulgarian vegetables in the export markets have good quality, but there are appropriate conditions for handling, grading, cooling, packaging, storage and transport. This leads to deterioration of fruit and vegetable quality and makes their sale difficult.

By constructing a system of well-functioning commodity market places a number of these defects shall be eliminated. As a consequence, the sales volume in the domestic and foreign markets will increase. Also, the pressure of European markets to import vegetables from their subsidized markets will be surmounted. Competitiveness of Bulgarian vegetables will increase, which will also lead to an increase in vegetable production and increase manufacturing employment.

If a producer implements all harmonized standards in respect of a certain product, then

the conformity of the product means that there is a compliance with the basic requirements. However, if the producer chooses not to follow a harmonized standard (as he has the right to do so because the standards are voluntary), he is obliged to prove by other means that his products comply with the essential requirements.

Producers are not restricted in their choice of a notified body with relation to the quality and service prices offered by them. They are completely free also to choose how to develop and produce their goods. When submitting their products to the EU market, they shall be able to verify the conformity of their products with the essential safety requirements defined in the relevant directive, and with developed technical requirements set forth in the harmonized standards.

Bulgaria has traditions and is specialized in the production of fruits and vegetables, and especially vegetable growing. This requires development of programmes for these sectors in compliance with the EU requirements.

The issue of food product quality in Bulgaria is currently raised with much poignancy. Given that this issue is of a priority to the European Union (EU), the more is the importance of solving this problem.

Quality activities should start as early as the raw produce in the farms. Much of the farm produce remains directly in the market for fresh consumption.

The current method of control of this produce in the producer markets is inefficient. There is no system of control. Also, staff in this area is not sufficient. And there are no control facilities. All this gives us grounds to believe that the development of a regulatory system employing quality indicators in the production and trade of fruits and vegetables is not only necessary, but much urgent.

Standards for quality indicators make it possible to determine the standing of production and trade, and to outline prospects for development.

Improving of the product quality is one of the main areas for development of technical progress and fulfillment of the national economic plan. The achievement of high quality products is not only economic and technical issue, but it has also a social aspect.

Quality is directly dependent on manufacturing facilities, level of technology, organization, logistical supply and sale. In no small degree it depends on the qualifications of managers and workers. Enhancement of product quality is a complex and many-sided process of great importance for the efficiency of production.

Under product quality is meant a set of properties that determine the fitness of a certain product to meet identified needs in accordance with its purpose

Quality is concrete expression of a particular consumer value. This concept, however, does not include all useful properties of the product, but only those that make it suitable to meet needs in accordance with its intended purpose. Products of similar purpose have different capacity to satisfy a need, i.e. they have different qualities.

Quality can be considered in three main aspects:

1. Production – considers quality as a set of properties that meet the standards and other technical documentation;
2. Consumer - quality is considered from the consumer's point of view;
3. Economic – quality is considered both in the production and consumer aspect.

Ongoing changes in Bulgaria necessitated the need for a reassessment of the standards, i.e. development of a new structural policy and the adoption of new priorities in the economic policy. The process of formation of new economic structures will require considerable time as the duration of the reorganization, the beginning of which started with the introduction of new manufacturing relations based on private ownership of production means and, at first place, of land. The new structure of agriculture, regulations and standards shall comply with the need to ensure maximum national self-sufficiency in the area of agriculture and food industry needs, and also provide the population with basic foodstuffs. Agriculture is assigned the difficult mission to contribute mostly toward leading the economy out of the crisis and to liquidate the striking imbalance at the highest possible extent. Given the opportunity for a relatively largest national self-sufficiency in the process of its development, agriculture can provide important export commodity contingents against smaller needs for resources for their production as compared to most industries.

This is especially important now for our country. In view of the imposing trend in the international market for an increased demand for organic food products rich in vitamins of natural origin, vegetable growing will be increasingly promoted as a growing opportunity for a significant sector in the international division of labor.

The place of vegetable growing within the range of priority of the agriculture in the structural policy is determined by the new dimensions of the food problem in Bulgaria and its solution on a research basis in accordance with the requirements of rational and scientifically-based nutrition. Given the need for a change in the foodstuff structure, it shall be necessary for the "organic fruits and vegetables" to take a larger portion in the balance of the national food recipe at the expense of reducing the consumption of sugar, butter, eggs, etc. These two motivations for respectively increasing the part of agriculture in the Bulgarian economic macrostructure though vegetable growing at mezo- and macro level shall define the direction, and in the future also the rate and depth of changes in the sub-sector in its structure.

Being definitely an inertia-driven system within the structure of the national economy, and particularly this of agriculture, vegetable growing will become a more mobile sub-sector as a result of the transition to new principles of operation based on the free market mechanism. Structural changes to take place will affect positively the volume of the total output, production efficiency and resource utilization because these will be forced to perform such a function.

Structural changes in the vegetable growing sub-sector are within the range of the mezo- and microstructures. They are defined as intra-industrial and product changes in view of the products produced. Because of their lower class they are more mobile and more radical. The ultimate goal of standards is to ensure efficient production reflected by the economic indicators of labor productivity, production costs, profitability, cost-efficiency, etc. Any standard is reflected directly or indirectly in the economic results, and because of this the latter should not be treated as separate regulatory parameters, but rather as consequential.

Working with standards leads to the realization of savings in materials and other resources; achievement of self-discipline; getting more, better and cheaper farm products.

Various economic activities aimed at identifying and securing production (detailed study of markets, their quantitative, qualitative and product range requirements, size and type of packing, transport, delivery terms, price, etc.) are in the field of marketing. Therefore, marketing in a market economy is considered as a basis for business and prosperity of businessmen and society. In particular, this applies also to the revival and development of the vegetable growing sub-sector in Bulgaria. And so, the new methodological approach to determine the size and structure of the sub-sector includes marketing studies which underpin all quantitative and qualitative parameters of the production.

**The main starting points in developing the theoretical and methodological basis for determining the standards for production of vegetables in Bulgaria are as follows:**

- Production and sale of vegetables will be based on private ownership of land as the most important and indispensable tool for production.
- The main forms of organization of production will be private family farms and various types of agricultural cooperatives and associations existing in parallel and not alternatively.
- The size and structure of the vegetable growing at all levels (macro and micro) will be defined as an adequate process under the supply and demand laws, and achievement of the highest profit motivating producers and traders for its qualitative and quantitative development.
- The basis of prosperity is a faster exit from the still existing state monopole structures and organizational forms with old content, and the establishment of modern market relations with the appropriate market mechanism to ensure the most efficient operation of the entire system within the sub-sector - production, processing, handling and fabrication, storage and sale in the domestic and international markets.
- Priority development of vegetable growing in the context of the current social - economic crisis because of its specific biological and technological features.
- The fullest utilization of the favorable climatic conditions and natural resources - soil

composition, water, sunshine duration, average and extreme temperatures, temperatures by years and seasons, rainfall, winds, terrain, etc.

- Compliance with existing manufacturing facilities and their rational exploitation as melioration structures (dams, pumping stations, irrigation canal network, fixed irrigation systems such as sinking, hydrants, drip systems, etc.); graded and geodetic ameliorated areas of the previous large vegetable gardens; canning factories and workshops for primary processing of vegetables; collection, manipulation, shipping and other points, warehouses, cold stores and storages, greenhouses, hothouses, etc.
- Opportunity to implement modern technology in the growing of crops and use of available technology within the farms.
- Assessing the role of the subjective factor - production experience, qualification, affinity to gardening and traditions of the Bulgarians in this more complex in terms of biology and technology sphere of agriculture and realistic determination of its meaning by the producer for his business and development of the sub-sector.
- Opportunities for investment and attraction of foreign capital.

**Another important methodological aspect is the use of a complex of factors:**

- New major factor is the absorbing capacity of markets. So far, it was assumed as granted, and not as a factor on which production is largely dependent.
- Sustainable economic development of each company and sector is directly dependent on their market orientation and competitiveness, particularly with the strengthening of the process of trade liberalization globally. A highly competitive growth requires not only liberalization and financial stability, but also structural and technological modernization, active innovation activity, skilled workforce, development of all sectors and by priority - agriculture, which provides food to the population. (3, p. 404)
- The solvent demand in the domestic market and the determining role of three main consumer groups concerning the size and structure (range of products, quality and time) of domestic sales. Until now, it was generally a full satisfaction of needs according to scientifically based dietary rates.
- Results from the study of price elasticity of food products would be very useful for company managers - producers of such

products. They can provide very useful guidelines for deciding on the pricing strategies of companies, and this is especially important for companies producing products of high price elasticity such as sugar, vegetable cans, etc. (8, p.194)

- The new economic relations between the processing industry and private producers - farmers, cooperatives and other associations.
- Self-sufficiency of farming families with vegetable produce when it is not goods for the farm.
- Opportunities for restoration of previous markets of fresh and processed vegetables and seeking new market niches. The state will play an important role here with its economic policy and international economic relations - treaties, agreements, quotas, duties, etc.
- Flexibility of vegetable growing as organizational and biological-technological option in view of changing market requirements and its advantage over other sectors in terms of restructuring and maintenance of market positions.
- Revaluation of the existing manufacturing facilities as a factor of production and possibilities for their recovery and organizational forms for their rational use - operation, maintenance and repair, renovation and quantitative increase by new machinery structure.
- A new approach concerning investment and its sources. Assessment of the great importance of attracting foreign investors at all stages of production, processing, manipulation after harvesting, packaging, storage, and particularly in sale of the product.
- An important factor for the development of vegetable growing and determination of its standards is the new socio-economic basis of production - the private family farm. The establishment of cooperatives and other associations of private landowners, and other means of production and capital will coexist with private farmers to serve them, and not as an alternative form of organization of production of vegetables. Worldwide cooperatives and associations exist alongside family farms and for the most part their purpose is to serve farmers. Therefore, the socio-economic base of vegetable growing is united - the private owner with different forms of organization of the main and auxiliary activities.
- As objective, independent of man and changes in his economic, political, legal and moral relations, which are also objective to a

certain degree, because they do not depend on a separate entity at this stage in the time period considered, are accepted factors such as: natural and climatic conditions; manufacturing experience, traditions, existing production facilities - greenhouses, canneries, workshops, warehouses and others, biological-technological specifics of vegetable growing.

Standards should be adopted and used as a finish to a research conducted in advance and also tested in practice. As indicators or acting elements in the production process these are not random numbers just recorded. Agricultural production is a natural result of a specifically determined, in terms of quantity, of items and tools of labour placed by man in a natural environment to turn them into grain, meat, milk, vegetables, etc. In the specific environmental conditions (soil and climate) it is not necessary to submit neither more, nor less seeds, fertilizers, chemicals, water, etc., to get a ton of output, more than it is determined by experiment or science, or at a certain stage of development and climate conditions it is not necessary to carry out hoeing, spraying, watering sooner or later. An important question is whether some standards are valid for different agricultural regions.

In agriculture there are standards for different types of products. The latter, however, are products of human work under completely different natural conditions, soil, moisture, light, heat, etc. Therefore, rates for use of materials and others are always relative values and their identifying with relation to the specific conditions of the region means that products shall be more expensive or cheaper as compared to the average production costs. However, deviations are permitted only in differences of soil and climatic conditions, since economic conditions are guided, planned and rated. For example, the cost of fertilizer is directly dependent on several conditions: natural soil fertility, moisture, planned production, etc., while costs for wages under similar other conditions should be identical.

**Finally, the following conclusions can be presented:**

1. In Bulgaria there are no theoretically and methodologically developed problems and adequate tools to determine the standard parameters in vegetable growing at macro-, mezo- and micro levels in the conditions of a market economy and the transition toward it.

The long delay to the land reform, incomplete legal framework, unsolved national problems concerning the ability of Bulgaria to enter the international markets through participation in international economic communities or bilateral trade and economic agreements with fixed quotas, and others, unresolved issues at the highest state level do not allow to establish certain regularities, objective reporting the effect of factors and establishment of relatively accurate standard rates in the production of vegetables at this stage and in the future.

Therefore, these findings and estimates are largely conditional.

2. Consumption and production of vegetables in the world are on the increase. Rates are higher in previously less developed countries. The increase of consumption in rich countries does not facilitate the supply of Bulgarian producers, because the market is very demanding in terms of product quality (organic product quality, preparation, packaging, freshness, organic purity, etc.). Competition is fierce. In addition to the traditional competitors for Bulgarian growers - mainly in the markets in Western Europe – the Netherlands, Italy, Spain, Greece and others, a particularly strong competitor is Turkey with its high expansion in the former Soviet Union republics, especially the Asian republics. Bulgaria in its future efforts to seek niche markets must comply with this, especially given the lack of experience in marketing.

3. The standard rates of the output is formed as a result of the impact of a large and complex set of factors:

- Natural and climatic conditions of which the most important for vegetables growing are:
- Production experience and long established traditions:
- Biological-technological and socio-economic characteristics of vegetable growing, determining its current development stage:
- Scientifically based dietary rules and the needs for vegetables;
- Solvent demand of fresh and processed vegetables;
- Need of raw material by the canning industry;
- Opportunities and structure of exports;
- Economic conditions and opportunities for technological improvement of production;
- Opportunities and mechanisms for investment in vegetable growing;

4. Standards can be characterized as dynamic indicators as changes occur literally every day in one or another indicator. It should be

emphasized that no agricultural product must remain outside the framework of the necessary production standards if the intention is to have efficient production.

5. A good professional training of the structures working on the implementation of the EU legislation in the field of agriculture is required.

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