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INFLUENCE OF FOOD PRODUCTS CERTIFICATION UPON MANUFACTURE INNOVATION

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This paper addressed principles of the Polish food certification system. It presents the scope of certification as well as principles and products which should be certified. This work describes all procedures of products certification including the sampling and testing, steps of process, documents required from the producer as well as additional requirements.

INTRODUCTION

At the moment, many consumers are searching for food other than the one originating from the mass production, using criteria of health, taste and safety. Furthermore, after the outbreaks of BSE, foot and mouth disease and avian flu, consumers demand that identification of the product source be fully guaranteed. The uncertainty about the food present on the market in masses has been solidified and, as a result, there has been an increasing demand for regional food, produced with traditional methods as well as for food originating from ecological production methods and from appointed farms. It must be noted that due to its character and relatively low production volume, the food produced with extensive methods cannot replace the food present on the market in masses, however, it can fulfill the niche market demands simultaneously making up certain potential for the limited group of agricultural manufacturers and processing plants.

Taking into consideration the data obtained from controls of trade quality for different food products, which were conducted in 2004 and published in 2005 by Trade Quality Inspection for Agriculture and Food Products, many discrepancies from the declared contents, norms and definitions were found. For more than 25% cases of non-meat trades and for more than 50% cases of the trades of meat and meat products processing (culinary meats, highly-efficient products such as *e.g.* luncheon meats and sausage) it was shown that protein content was decreased for more than 54% of cases, fat content was decreased for 21% of cases, water content was increased in 8% of cases, while salt content was increased in 5% of cases and in 12% of cases starch, jelly or meat juice as well as fat-meat content was decreased. The discrepancies between the given norms and declarations result in poor product quality and getting of undue profits by the dishonest manufacturers at the cost of damage of the brands of the given products and the overall brand of the Polish food [Agricultural and Food Quality Inspection, 2005].

Those significant differences between producers' declarations about their products' content and the actual quality of the products pose a necessity of creating a system which guarantees quality and traceability of the industrially produced food. It is especially important that this system should encompass the widest assortment of basic products which can be fully identified from the raw products to the final product. The origin of the product, including the possibility of its identification and tracing within the production chain from the farm to the last processing plant, is the feature sought for more and more frequently by consumers. The consumer believes that due to the possibility of identification, the products are under control and, therefore, are of higher quality and are safer in comparison to the others. The market in Japan, USA and certain EU countries extorted transparency of food origin – "*traceability*" from the food processing entities. The consumers from these countries who possess high consciousness of the needs and rights, posed definite requirements to the businesses, being also ready to bear higher financial costs for this type of food.

The markets of countries where the systems of transparent origin of selected raw materials and traceability of food products were introduced, are the markets where the dominant role is played by the conscious consumers who take care about their health also by consuming food of the highest guaranteed quality. This significant market segment, which demands the guaranteed origin of the high quality safe food, gave the possibility of achieving larger incomes by the manufacturers as well as the possibility of further system refining and broadening of the assortment of foods included in the system. It should be underlined that introduction of agricultural-food materials

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into the system of the guaranteed origin and the transparency of their processing with the full traceability at every stage of processing should be voluntary and only partly payable. The systems of guaranteed origin, which are facultative, can fully use the obligatory food safe production systems.

Taking into consideration the above-mentioned ideas, the possibility of implementing in Poland instruments which enable and encourage the initiation of this type of systems is well founded. At the moment, within the existing services, government and non-governmental agencies acting on behalf of food manufacturers and distributors in Poland, there is a need to create the legal system of traceability of the agricultural materials destined for further processing. Extremely important aspects of the created system are benevolence and partial payment. It is particularly important because the prepared system would involve more than 80% of the agricultural products and would give the possibility of enrollment for the widest group of manufacturers. The foundations will provide bases for certification of the food quality in the frame of the general system of the voluntary food quality certification.

PRINCIPLES OF THE POLISH SYSTEM OF FOOD QUALITY CERTIFICATION
[Wierzbicka, 2006a]

The system of food quality certification and granting of the guaranteed food quality mark should include these manufacturers who will use materials originating from the farms included in the system of the controlled origin of materials. Within the next years of certificate granting, the high quality food originating from the producers within the system will be the guarantee for the built system, high credibility and the certainty that the given quality certificates and marks were given to the food products which are characterised by the high and guaranteed quality.

The certificate and the mark should be given to food products which were produced within the systems of guaranteed origin. The system should constitute a closed surveillance system over the quality of the produced food. Particular care should be taken to inform the widest range of national and foreign consumers about the system. Information campaign should provide information in a clear and unambiguous manner and it should create the conviction about the highest credibility of the granted certificate and quality mark.

The system of the guaranteed origin of agricultural products and certification of food quality will top the effort of agricultural and food manufacturers by: (1) making it possible to all interested agricultural manufacturers and processing businesses to take part on even principles in the created systems of food identification and quality certification, and (2) providing consumers in Poland and foreign consumers with credible and reliable information about food products produced within the created system of food identification and quality certification.

Within the scope of the national information about the introduced system it is necessary to inform the manufacturers and consumers about the advantages coming from the implementation of guaranteed origin of agricultural products and certification of food quality system. The equally high effort of informing should be made in relation to the foreign consumers and the contracting parties of foreign trade businesses in Poland. The undertaken work of informing foreign contracting parties and the better perception of Polish food and potentially high export benefits coming from these implements must be underlined in the informative announcements for manufacturers. It is concluded that the following groups of products should be included in the system of the guaranteed origin and food quality certification: cereal products, meat products, milk products, fish products, vegetal and fruit products, fruit and vegetal juices, pastry products, honey, beers, natural, table and medicinal water, alcohol drinks and vodka.

The situation of material origin will not be complete within the first and the second year of the system of the guaranteed origin of agricultural-food products, but the further years of the system in force should solidify appropriate renown and should guarantee of the high food quality. The certificates given by the Institute of Food Quality will be important marketing tools in food export.

THE GOAL OF FOOD PRODUCTS CERTIFICATION
[Wierzbicka, 2006a]

The main goal of certification is to work out the credible and recognized system of food quality certification based on the use of agricultural products produced within the system of the guaranteed origin created by the government agency. Moreover, the aim of food quality certification is to guarantee their highest quality on the national and foreign market, which in turn will allow to enlarge export using not only the still low price attribute but also the quality attribute. The final foal of certification is authenticating the Polish food on EU markets and beyond as well as constant and persistent removal of export barriers resulting from the lack of the guarantee of the high quality of the exported food due to keeping proper and strong position on the EU markets.

THE SCOPE OF CERTIFICATION
[Wierzbicka, 2006a]

The certificate of food quality should include food products produced based on agricultural products originating from the created system of guaranteed origin within the government agency being responsible for the market of agricultural-food articles. This system will legally encompass monitoring of the production of agricultural materials and will make the good basis for the created system of the certification of the food quality within the institution certificating the quality of the food. Both systems will complement each other mutually and will be compatible making up together one general system of „origin identification and guaranteed quality of food products".

The scope of certification will be the following [Wierzbicka, 2006a]: (1) the food produced on the basis of implemented systems of food safety which are obligatory for the producers; (2) raw materials constituting food half-products destined for further processing; (3) material content on the basis of the norms and specifications declared by the producer; (4) processing technologies declared by the producer; (5) ready products (material content, nutrition value, functionality,

information on the package) on the basis of the norms and specifications showed by the producer and the food law regulations of the Council and European Parliament 178/2002, 852 and 853 as well as 882/2004 and the regulations of the act on food safety of August 25th, 2006 (JL 171. item 1225); (7) providing consumers with credible and easily accessible information about food products produced within the created systems of the origin identification and the guaranteed food quality; and (8) providing consumers outside Poland with the broadest information about the system of control and guaranteed origin and the quality certification of food products.

Principles of certification [Wierzbicka, 2006a,b: (1) impartial and reliable accomplishment of analysis of the documents submitted by the producer within the coded system; (2) the process of certification is accomplished on the basis of sampling by the appointed person and testing in the accredited laboratories. The range of tests required for products should be in accordance with the range defined by the producer and the valid law as well as by using accredited laboratory methods [Wierzbicka, 2006a]; (3) analysis and evaluation of the production process by the auditor; (4) evaluation of the documents provided by the producer and the test results for the taken samples as well as assessment of audit results; (5) preparation of additional documents for the Russian certification agency; (6) delivery of the obtained results and documentation by the food certificating institution to the certificating agency in order to obtain the certificate of agreement for the products, which in turn is destined for the national market or the market other than the Eastern one. For the Eastern markets (Russia, Ukraine) the documentation must be delivered to the Russian certificating agencies on order to obtain the acceptance of the submitted results and the right to export the certified products; (7) issuing the certificate and the mark of "certified food quality" by the certificating agency – the Institute of Food Quality for the products fulfilling the quality requirements on the basis of obtained results and the certificate of agreement; and (8) constant quality monitoring of the certified products within the period of 2 years (the period of certificate and quality mark validity).

The scope of tests for the certified products [Wierzbicka, 2006a,b]: (1) the parameters according to the required norms accepted by the manufacturer for the product and according to the requirements of Polish food law, the Council and European Parliament; (2) testing of the agreement between the producers specification and the certified product and the obtained results; (3) additional criteria defined for the given product groups; (4) product functionality; (5) functionality and aesthetics of packaging; (6) consumer information; (7) nutritional values of a food product; and (8) anti-nutritional agents present in the product (heavy metals, chemical compounds, *etc*).

The principles of sampling and testing [Wierzbicka, 2006a,b]: (1) samples are taken by the appointed person from the testing institution according to the valid regulations, in a documented manner, the samples are further transported to the laboratory in appropriate conditions (where time and temperature are the most critical parameters); (2) tests should be carried out in the coded system by accredited laboratories according to the scope of testing declared by the producer and requirements of the food law. In the first year of certification it is allowed that certain tests are realized by the research institutions according to the valid methods, but which posses no accreditation; and (3) the scope of required tests for the products is included in the annexes relating to the product groups.

The costs of certification, including sampling and tests as well as the costs of issuing of the certificate is covered by the applicant with the defined part of co-funding from other means (not lower than 70%). The lack of co-funding to the certification of the food quality will make it impossible to start the process for the small producers, while for the bigger producers it can extend the decision process about starting the certification in the situation of the lack of good and wide renown of the certificate and the mark.

Steps of the Certification Process [Wierzbicka, 2006a,b]: (1) information about the scope and requirements of the certification process submitted to the producers by the mass-media; (2) accepting the applications; (3) analysis of documents; (4) application acceptance; (5) definition of the scope of tests, signing the contract with the producer and payment of the certification fee by the producer; (6) the order of sampling and audit in the plant by the accredited agency (according to the accepted principles of certification); (7) preparation of documents submitted by the producer and of the obtained results; (8) independent, parallel submission of the documentation to the certifying agency in order to obtain agreement certificate; (9) issuing the "Certified Food Quality" certificate; (10) quality monitoring for the certified products during the period of validity (2 years).

DOCUMENTS REQUIRED FROM THE PRODUCER
[Wierzbicka, 2006a, b]

The producer needs to complete the following documentation: (1) application, documentation relating to the production process (material specifications, production norms, specifications for the ready product, results from the own laboratory according to the accepted norms); (2) documents confirming food safety systems implemented to the production process, and in the further years – the documents conforming the guaranteed origin of the materials used for the production of the certified product (according to the certification process; (3) producer's declaration about constancy of the production method, including origin of materials, quantitative content, used technology of production and the safety systems used for the production process as well as the validity period for the mark "Highest Food Quality"; (4) presentation of the identification program with the procedure of removal from the market of the product not fulfilling the accepted standards; and (5) the list of required annexes.

ADDITIONAL REQUIREMENTS. PROMOTION AND ADVERTISEMENT FOR THE SYSTEM OF FOOD CERTIFICATION
[Wierzbicka, 2006a,b]

All data relating to the process of certification which help to understand the process properly should be widespread

among consumers and national producers as well as foreign consumers at least half a year before the start of the certification process (content-related, serial press publications, information in the radio and TV).

The widest attainment to the public opinion with full information about the system and its advantages in relation to the consumers, also about advantages proportional to expenditures in the period of the time before granting the Certificate, that can bring the intentional result as well as give benefits to food producers are needed.

Information about transparency, impartiality and the general system implemented for the certification will create a proper climate and demand among consumers for this type of certified food.

Preparation of the credible system rewarding the high quality will strengthen the proper picture of such certified food.

Providing information in such a wide dimension is the necessary condition because of the multitude of existing competitions led by various bodies – regional as well as national (there are more than 50 various competitions relating to the widely understood quality of the food). This large number of competitions decreases the rank of the given certificates, it introduces comparatively high devaluation of such distinctions and brings reluctance of producers to take part in any activities of this kind.

Additionally, the reluctance of the producers to take part in such undertakings stems from the lack of any advantages from the given distinctions and prizes.

CONCLUSIONS

Food quality certification system will yield proper results once the theses specified below are applied in the system:

1. Accepting clear foundations for the functioning of the certification process will make it possible to disseminate this process among consumers, national producers and foreign consumers.

2. Proper and full information about the process of certification will make it possible to show advantages of the food quality certification among consumers and producers, the proper result will be brought back – the proper number of producers will be interested in the system and there will also be an appropriate interest from the consumers' side.

3. Knowledge among consumers about the implemented general system will make it possible to create market demand for this type of certified food.

4. Proper picture of the certified food and the certificate itself as well as of the mark will be created by showing the credible system rewarding the high quality based on the reliable and general tests.

5. The certification process begins together with the informative campaign based on the accepted assumptions of the food quality certification system.

6. Preparation of the credible system of food certification enables obtaining essential advantages by consumers and producers. This real advantage can prompt the need for accession to the certification system among essential number of producers, thus increasing the quality of the produced food and its better perception and competitiveness on internal and external markets.

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W pracy przedstawiono zasady polskiego systemu certyfikacji żywności. Wskazano cel, zasady oraz produkty, które powinny podlegać certyfikacji. Ponadto przedłożono procedury certyfikacyjne, w tym pobranie prób, rodzaje testów, niezbędne dokumenty wymagane od producenta jak również inne, dodatkowe wymagania.