

„THE AGRICULTURAL QUALITY AND ENVIRONMENTAL MANAGEMENT IN THE NEW HUNGARIAN CERTIFICATION SYSTEM TÁJGAZDA®”

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Abstract: The new Hungarian Tájgazda® system of origin and quality assurance system basically considers the agricultural quality and environmental management points of view.

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Basically, agricultural products and food quality can be characterised by an inventive definition according to which *quality means availability for use*. To start from here, the real quality of food products can be influenced by three factors, namely, *producers' value, consumers' value and nowadays food safety*.

We can conclude that their more intense prevalence in a quality assurance system can only be reached if the points and methods of *environmental management* are considered in the case of all the three factors. By this way the demand for and the secure market of such products can be raised whose production requires more labour force with less yield, pollutes the environment to a smaller extent, more closely related to underdeveloped areas and the customer is willing to pay a higher production price for them than for industrialised mass products treated with chemicals.

The new Hungarian Tájgazda® system of origin and quality assurance system basically considers the agricultural quality and environmental management points of view in accordance with the following:

- (1) It assures agricultural basic materials, occasionally in a chain the single foodstuff in a voluntary, independent system that complies with EU regulations.
- (2) The implementation of landscape management is based on production requirements and controlling methods tailored to the local special features and traditions on the one hand, counselling as well as preparatory services offered to the farmers on the other hand, and finally, on the organisation authorising the registered trademark.
- (3) As our country totally lacks the quality assurance of basic materials and agricultural production while it is highly recommended by the EU and general practice in the west, the national level implementation of the Tájgazda system would not threaten the existing food trademark systems (such as from the local primary producers the national HÍR or to “Hungarian Products”). Moreover, it would only help its establishment and make it more authentic.
- (4) Tájgazda is an understandable and transparent system that pays attention to national farming conditions as well as quality and environmental management considerations, which, among others, promotes better accessibility to markets, higher profitability, creating jobs, increasing biodiversity etc.

The farming aim of TájGazda® certification

The interest of the before mentioned demands realization – based on the farmer, commercial and consumer’s demands’ satisfaction – was established in 2013 the TájGazda® certification system, which consists of a detailed regional full-scale (plants, cultivation, animal keeping, processing) output regulation system (the conditions) the realization method of the independent controlling and correspondence processes and the certification’s accredited conducting.

We can tell in connection with raw material and food products that – although sustenance is our sanitary safety's basic state requirement – its certification is EU and on the country's level a market category because it depends on the farmer/producer and the customer's agreement. *In all these cases it is feasible with only volunteer and contractor compliance-certification proceeding.*

TájGazda[®] System prefers volunteer chain-certifying and the shortest food-chain strategy. Therefore the quality of raw material is secured by the production, the keeping technology's certification. And also the quality of products is certified by the usage of the certified (certified by TájGazda[®]) raw materials and by the certification of the used technology. In connection with this there is important information about the certificate that it gives guarantee always in a fixed quality and technological attributes a certain regulation (from a regulation system) *in what rate were kept and implemented.*

Some certification systems in food-product- supply-chain run on contractor level (business – to business, B2B), on the other hand between the contractors and the consumers business – to – consumers, B2C). The TájGazda[®] System would like to certify on both system's level in food-product supply-chain.

The usage of TájGazda[®] quality insurance system helps to produce good quality products which with its market value turns farming into more productive and also forms new rural workplaces and improves the residents' health level.

The determining notions of TájGazda[®] certification system are: landscape and landscape farming

By the law the notion of landscape is the following: 'the surface spatially impoundable, it has typical synthesis and featured part, with typical natural values and natural systems and also with the features of human culture where we can find in interference the natural powers and the artificial (made by humans) environmental elements.'

By another phasing the landscape 'is the surface definite detail which stands apart from by its neighbouring areas (landscapes) with its features and operation. It is a kind of functional unit which natural operation is interference by humans and in the same time he is the part of it.'

Landscape is the effect of nature in a given area in which human and human activities its part. Every living species are forming their environment by their need but only human is capable to form and adapt it irreversibly. Human is the part of nature and mostly lives in a certain landscape but nowadays the necessities of life are not usually come from the same landscape.

From human's point of view landscape is –by the human interferences quality can be three behavioural style or features:

- a., *Counter active* when they work out a trade-like agriculture, a landscape destruction, a water-loss circumstances and etc., *the only aim is to gain profit, the agribusiness.*
- b., *Unconcerned* when unconsciously or to build on generational habits (to the learnt) the human activity lives in the landscape and accepts the natural farming possibilities which all together means *traditional farmer's farming.*
- c., *Cooperative* when human activity consciously tends to keep the whole natural system and *orientates to take up the extremity* (with this comes the interaction of some elements subservience).

By all the above *the landscape is regarded as a natural system* in which the natural, the environmental, the societal and farming elements cooperation show up in the equalization of extremity. For that in the first period of landscape farming big swings are typical (e.g.: water supply-, temperature- extremity and wobbling), on the other hand because of the landscape farming cooperation the extremities gradually equalize, therefore in *built out and constantly working landscape systems extremity is not* or just in special cases typified.

In a certain landscape we can talk about landscape farming if human's and nature's connection during the activities which are made for itself and for human society's cooperation and unconcerned behaviour attributes so in human activities the cooperative and the unconcerned elements are in dominance they influence the natural system's operation in a positive way and the counter-active elements are not present.

So we have to evaluate the landscape and landscape farming as a natural system, the running of processes in the landscape (the maintenance or the reduction) and human activities connection to the landscape.

We can highlight that *we cannot name landscape farming* that activity where there is human activity which is hindrance, disturbing or wrecking, but the whole farming contains unconcerned or cooperative elements. (By the work of G. Molnár and his colleagues in 2003.)

From landscape and society's point of view human society's needs and necessities are secured by its own farmland in a certain landscape. The maintenance of these farmlands depends on the preservation of natural resources condition. So we have to do such a farming which helps to keep the landscape's natural connections. Its instruments are e.g.: vegetal and animal species of the area, natural plant surface, natural water systems, grass, aquatic habitat, the conservation of genetic diversity, extensive animal keeping, the nature- water- and soil- protection typify all together the protection of production sites aptitudes and so on.

Because of the above mentioned facts the principle of landscape farming is environmental adapting. Soil is used everywhere for that and with a certain intensity for it is the most suitable or it is capable to put up with it without any damage.

By economical point of view the main characteristics are those of the environmental and landscape farming which in systems is capable to produce good quality and ecological, agricultural raw material in adequate quantity to the production site's requirements. During this process they keep the balance of environment and local society, biological diversity with the use of the following:

- By *leasehold* striving to harmony with spatial-function (protection, environment usage with output and consumer purpose) and *sectoral scales* ecological balance;
- *Human-scaling and reasonableness*, forming the factory- and field-size, spatial structuring: landscape protection, ecological values, traditions, landscape, aesthetic, economical, processing and technological angles.
- The usage of ecosystems built on cycles and maintenance of cycles within factory and region;
- Manufacturing special *quality*, protecting *diversity*, ensuring *employment and production sites aptitudes* –e.g.: output potentials, environmental sensitivity and vulnerability – *adequate intensity farming system usage* (e.g.: grass based animal keeping, extensive meadow- and grazer-farming, landscape fitting arable farming, traditional plantations viticulture and orchards, extensive fish- and reed-farming, or such a mixed farming systems like traditional and/mixed agrarian farming, the ranch, the floodplain or more systems ecological farming);
- Adjusting to landscape and arable farming in the following main areas:
 - *maintaining agro diversity adequate to the landscape*, forming economic structure, producing biological bases based on the landscape (vegetal and animal species and species structure) their coupling, and fitting into crop-rotation and to seed planting alternation (multi-coloured against single-coloured like e.g.: against mono-culture);
 - using *differentiated agriculture technique* in each natural units (great- central- and small regions) cultivation, soil preservation, soil-strength farming, fertilization, organic matter farming, sowing, care of the crop, plant protection, harvesting), which *fits perfectly to the local agro-ecological conditions*;
 - *the lands variant* production, producing harmony among animal rate and natural animal tenability,
 - Universalize and protect native and/or formerly native *domestic animals* and also land fitting-, flexible- (to land aptitude) *animal keeping systems*.
- To make farmers, peasantry and the rural populations to real farmers, to use the local public, labour force, values/resources build on farming systems. (By the work of J. Ángyán and his colleagues in 2003.)

The reasonableness of the relevant quality certification for farming and food production

By a study made for the European Union Agricultural Directorate (B.M.J van der Meulen, 2010; EU Commission, 2009; High Nature Value, HNV, 2010; S. Hearing, 2006; CAP, 2007-2013; GLOBAL G.A.P. (EUREPGAP), 2010; SGS Hungaria, 2010) in the past few years significantly increased the number of voluntary certification systems for the agricultural products and foods. This survey stated which was treated for the Commission in 2010, that approximately 440 such a system was formed mostly in the last decade. Most of the voluntary certificate system exists in the Netherlands (150 types) mainly in cattle milk- and meat production areas. The most wide-spread voluntary certificate systems in the European Union are the following:

- CBL: Centraal Bureau Levensmiddelen (Dutch Association);
- BRC: Global Standard of British Retail Consortium;
- Global GAP: An international integrated farm quality insurance with the very detailed extension of Good Agricultural Practice (1-3 volumes)
- GFSI: Global Food Safety Initiative (Dutch initiative with international certification cooperation)
- IFS: International Food Standard of German and French retailer organisations.

With in the scope of that it was highlighted and fixed that the certification systems should be worked out based on the following most important characteristics: environmental protection, animal-keeping well-being; consumer value and quality; labours well-being; farmers contract agreement (e.g.: Fair Trade); climate change worries; ethical matters; religious and cultural aspects; farming methods and ancestry (source).

The owners of the certification systems can be farmers and growers, recorded non-governmental organizations, interest groups and tradespeople, registered experts.

For the followings the object of the certification system should be some European Union requirements, that is:

- Ruling interior commerce, have free access to certification service and for the systems efficiency maintaining fair play business conditions.
- Ruling the circumstances of competition in a way with which the certificate programme will not lead to horizontal or vertical negotiations restriction which would mean misuse of commercial power;
- Informing traders and having brand requirements;

The TájGazda[®] certification system

To take account of the before mentioned facts we wanted to create an insurance system *which takes into consideration the regional aspects and prefers cultivation, animal keeping and processing with the characteristic of the landscape using its good aptitudes*. So our aim was to form a certification system which is conducive to landscape farming. In such a place the raw material is grown in a needful amount where the soil and the environment is the fittest. *They keep species, variety which can realize the landscape aptitudes very well*. They prefer certified raw materials and local product preparation.

We solved the landscape farming technical certification in TájGazda[®] system with forming and using the so called twin tracing landscape farming and with the new explanation of the notion landscape. What does that mean? If look at a rural area as a map in that the landscapes are varied mosaic-like. This lively landscape variety must be followed accurately, practically and easily in a landscape farming certification's regulations. *The landscape farming certification is always possible on a certain estate, land. For a certain estate there must be given a specific production regulation*. For the realisation of the certificate the least number of production regulation types must be given.

The farmers, product makers do not want to work more but increasing their products' values they would like to farm more productively. As well as the certification helps to produce a god product if the process of the production is controlled very often. *That's why in the explanation and the keeping of the certification's regulation, in the system's operation there is a regional consulting who helps the farmer. This consulting person is declared as the local supporter, observer of the certification's*

regulations. Our certificate's data regulation is made by self- admission by farmer, animal keeper in a definite period which does not disturb producing and keeping. In this way with the help of farmers, producers we ensure the validity of the certificate and we also use the newest IT technology possibilities. With self-admission and field controlling and also with the IT technology background we ensure that this system became more flexible, cheaper like a small organisation. We created new types of modernised documentation which is based on IT technology. The certificate like a chain-certificate from raw material to the finished products supports the production of good quality products - as good quality gastronomy- as the TájGazda® certification's highest scale.

The system works online. The certification's trademark can appear on products. In our point of view the certificate is for the customers. That's why beside the trademark which is on the product -as the symbol of quality- we provide further important information to our customers. *With the QR code and also with the system's inquiry possibilities on the location of purchase the customer can gain knowledge about the product's features, ingredients, producing steps, from where, to whom its raw material comes from, what kind of processing was used or one can buy a product straight from the manufacturer.*

Landscape farming used as a principle by customers of TájGazda® products support sustainable environment and help to renew nature. Keeping the system's regulations reduces the presence of harmful substances and improves the value of internal substances. Keeping the certification during processing the internal substance is not damaged.

During the operation of TájGazda® program four disciplines must be kept all the time:

- to ensure the preparation of efficient, economical, sufficient and safe food-products,
- to keep and sustain natural forces,
- to treasure viable farming and to ensure sustainable subsistence,
- to perform social, cultural needs.

More over the usage of this system does not mean a big burden for its user (producer, farmer, product manufacturer) not only financially but also in logistic. There must be definite and simple criterions of the certification, its regulations must not be evaded. The user, the customer can get information from the final product's certification stages.

Operating TájGazda® certification

As it is planned the TájGazda® system can be reached as an online quality certification (tájgazda.hu). Which means its basic communication area is a website. On this website can receive guidance the farmer about its own certification requirements, production, animal keeping, the expectations of processing technology, the condition of certification, and about the field controls. The farmer sets down the production, keeping, processing data which are expected by the certifier. These recorded data is classified, protected by name and catchword, only the user (the farmer) can permit its usage. The data of the certification is recorded primarily by the farmer but it is possible to give data in handwritten form in this situation the data recording must be made by the certifier.

The attributes of the system:

- *The quality certification is a 3 years long period*
- Each period begins with a contract which contains the *requirements of the cooperation and with a complex (audit) control*. It contains the farmer's data, earth, (its GPD coordinates, topographical number, the land size, the value in gold crown etc.), farming aptitudes, used farming technologies, animal keeping attributes.
- In each year till the beginning of spring works or until the end of clamp *the farmer fixes a plan for its lands*, animals with the help of base data and the web-site.
- *Regularly (weekly) and traceably keeps a diary about the production, and breeding data* (fieldworks, seeding, biological control, keeping and breeding attributes), which are controlled authentically with an initial control and later on with controls on the field.
- On the web-site the farmer's production, keeping and making attributes are visualized. The farmer, producer with using his own data can form a vice- web-site which can help the farmer's product marketing, on which he can introduce his farming, his products, product attributes and circumstances and their obtained classification. The farming and the products

can be commented and evaluated by the registered customers, viewers on the farmer's own web-site.

- TájGazda® System ensures a chain certification, the brand can be visualized on the products so the product's raw materials' production and the product making period can be followed by the customer. The web-site is not the obligate site for selling the farmer's products, with that a number of high quality web-site is dealing and the farmers can use these possibilities much better nowadays. So if the farmer can be found on another web-site which helps him to make sales we provide information about the farmer, we give the quality certification and the farmer's data and forward new data too.
- On the web-site there is a menu system which helps the orientation. We secure the farmer's data with authority levels and also the customers' personal data which they do not permit to appear. The web-site's separate page will be possible for the farmers to data input, which is protected by user name and catchword and also the customer's access which is also attached to security regulations (E.g.: Facebook registration). The customer can search for products which are in category and also by farmers and producers and also by town. The web-site will be suitable for giving direct information to farmers (EU regulations, tenders, important dates, quality certification dates).

The effect of TájGazda® requirements – scoring

The inspector *evaluates the effects of the certification requirements*, regulations, the level correspondence or its non-effects, the condition of non-effect and defines the severe deviations or the unintelligible state – if it occurs- and also fixes the possible high concerned frequency of range. By this information it can be stated if *TájGazda® requirements are effected on the whole*. The verification must have touched the *requirements* of the endurance regulations.

Classing the effect of the requirements

TájGazda® certification program has six classing possibilities, these are:

- 1 st class code =	Total correspondence with the producing and the requirements of the food producing certificate
- 2 nd class code =	still acceptable correspondence with the producing and the requirements of the food producing certificate
- 3 rd class code =	not acceptable correspondence with the producing and the requirements of the food producing certificate
- 4 th class code =	severe difference from the producing and the requirements of the food producing certificate
- 5 th class code =	not evaluable state in the producing and the requirements of the food producing certificate
- 6 th class state =	highlighted importance of correspondence with the producing and the requirements of the food producing certificate

Corresponding with the above it is needed to visualize by scoring the result of the verification as it is shown in the following tabulation:

Scoring tabulation

Class code	The effect of requirements (evaluation)	scores
1	- total correspondence	10
2	- still acceptable correspondence	5
3	- not acceptable correspondence	0
4	- Severe difference	- 5
5	- not evaluable state	- 10
6	- highlighted importance of correspondence	+10

Reaching the 80 % of the maximum scores by main sectors means correspondence with the certification requirements but it is exclusive circumstance if with the highlighted importance with class code 6 there is no evaluable control result.

The status of the requirements non-effect

- not acceptable the effect if by the circumstances the correspondence does not reach 50 %.
- severe difference if during the verification the circumstances does not reach 25 %.
- not acceptable correspondence can be stated during the verification if from the given requirements nothing was effected, there is no correspondence.
- highlighted importance of correspondence can be accepted with those requirements which – in the Verification requirements list – got a special asterisk (*) and which also got the total correspondence or still acceptable correspondence evaluation.

The base information of the brand, its description, the object of the regulations

Kind and type: certifying brand

Form: colourful, illustrated brand with caption

“TANÚSÍTOTT=CERTIFIED TÁJJELEGŰ=PROVINCIALISM GAZDÁLKODÁS=FARMING ÉS=AND TERMÉK=PRODUCT” (TájGazda)

Be in force: Hungary

The brand’s form and its colours:



The definition of the brand’s protecting circle by the Nizza Grading System:

Section 29: Meat, fish-, poultry- and game; preserved, dried and cooked fruits and vegetables; jams; eggs; milk and dairy products.

Section 31: Grain-seeds, agricultural, horticultural, forestry products and seeds which do not belong to other sections; livestock; fresh fruits and vegetables; seed grain; alive vegetables and flowers; nutriment to animals.

Sector 44: Agricultural, horticultural and forestry services.

The extensibility of TájGazda® certification system

In the development of TájGazda® certification system first we wanted to make a certification which helps the selling of domestic, farm products. We saw that we have to certify the producing which is in connection with landscape. So we had to put into the centre the landscape, the landscape features, the landscape farming. The landscape, we can see from above, the farming that we have to do in the property. We had to interpret the landscape and landscape farming in a new way because we wanted to create a provable, keep able system. The product makers in our opinion do not want to launch a difficult system and its keeping is also a problem. At the creation of the system we had to interpret landscape without any boundaries and we had to build up the certification processing from easy and logical elements. With the support of the IT and information background we could develop a system which can be used in any circumstances, well acceptable and usable. Without borders we would like to satisfy all demands of more and more users, as a European brand we would like to operate the system. That’s why beside TájGazda® we name for TájGazda Untouched Quality and TUQ abbreviation is used for that too. We indicate to pure quality which takes the operating of nature into consideration.