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Rector's Allocution

*We have the special pleasure to let you know that the Review of our University, „**Bulletin of Scientific Information**", having ten years of consecutive issue, it achieved the recognition of the **National Council for Scientific Research in Higher Education** (NURC), being comprised in the category „**National Reviews – C Category**".*

*So, the Bioterra University review „**Bulletin Of Scientific Information**" works as a real platform for the information and exhibition of the most recent and valuable research in the agricultual field and connected sciences (food industry, agro-tourism, ecology, agricultural economics etc.).*

This way I express my gratitude the contributors to our review, authoritative academic and univeritary names of whose studies are found in the selection done by the scientific board of the review, co-workers with whom we have strong relations of partnership and mutual support in the development and course of some conjointed research projects.

I wish to the review many and consistent issues.

Prof. Floarea Nicolae, PhD
Rector of Bioterra University Bucharest

Editorial Board's Allocution

„Bulletin of Scientific Information" magazine was published at the initiative of several young researchers with the direct support of Bioterra University Board, having the first edition in 1998.

Years passed and this magazine has enriched continuously its scientific and didactic dowry, becoming slowly but surely a veritable platform for academic information.

In 2008 the magazine changed itself into a new more dynamic and attractive format, being published in special graphic conditions (full-color) and fully in English language. Also, since 2014 the magazine benefits of a modern website: www.bsi.bioterra.ro.

Every year the editorial team has increased the number of members; nowadays it brings together numerous personalities of the scientific and academic world from different foreign countries, thus being a guarantor of a high scientific level.

Thanks to all our readers and collaborators that through their suggestions, criticisms and feedback contribute to the improving of our magazine quality.

Prof. ATUDOSIEI Nicole Livia, PhD
Vice Rector of International Relations

Prof. GALAN Catalin, PhD
Vice Rector of the Educational Activity

Summary:

MAIN ISSUES OF THE ROMANIAN LAND MARKET

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Abstract: *The importance and value of land increases as the economic development level is higher. Compared to European countries, the Romanian economy has a low level of development, which the land market acts accordingly.*
If land market needs to act with caution and responsibility because agricultural land is one of the main strategic resources.
In this context, the year 2014 marks the liberalization of the market of agricultural land in Romania for potential investors from Europe, according to the Common Agricultural Policy.
Therefore, within this article are quite a few reasons to believe that the acquisition of agricultural land is at least a subject of great interest both to Romanian farmers, and especially for foreign investors.

Key words: *land market, fragmentize, freedom of the land market*

Introduction

The land market is an objective part of the economy on the free and democratic market. [4]
The economical relations of the land market are somehow actions which stand for that link between property and utility.
The working rules of the land market are indeed as any other economical good from the market but there are some specific elements because:
- It has a national feature: the land, as a good, it is a special one which it can't be deployed, added or fabricated because it's something vital to a nation existence;
- There isn't a specific price for it due to different prices of each piece of land.[5]

Materials and methods

The main purpose of this paper is to identify the main issues of the Romanian land market. Therefore, there were studied certain data from the National Institute of Statistics, FAO and of EU. Moreover, we studied the field literature and different researches.

Results and discussions

» The lands register of the agriculture lands

The main issue of Romanian land market is the lack of a lands register with its owners and fields. In Romania, there are few villages where the lands are registered, that's in Transylvania and Banat, but we can't say the same for Moldova and Muntenia regions.
Nowadays, there aren't any current circumstances regarding the lands register, although in the past 20 years there were lots of important changes in the structure of the land market. The registers made before 1898 are useless because the agricultural fields owned by IAS and CAP were given back after 1990 to the previous owners.

There's a main issue regarding the lands register and that's the lack of a land inheritance happened due to the retrocession based on certain laws.[5]
The lands register correlates and checks "the situation from the exact place with that one from the paper" because there are times when the property from a document isn't the same as the real one.[7]

which referred to the free registration of all buildings and lands and also to the opening of lands books or inheritance certificates, program through which all land issues have to be worked out.
The private property guarantees the individual freedom and the social democracy, the state being the main supporter, but also it could stand for the risk when speaking about

Chart no.1 - Land farming area in Romania

Year	Total amount of farming area (ha)	Whereas:			
		Farming area from the private area (ha)	%	Farming area from the public area (ha)	%
2012	14615057	13712985	93,82	902072	6,18
2013	14611883	13680579	93,63	931304	6,37
2014	14630072	13699725	93,64	930347	6,36

Source: data realized by the writer from the National Survey Institute date

The objectives of the lands register are to give information about the lands quality and quantity in order to direct the agricultural activities and to work out the financial problem, to establish the incomes and fees, policies, updates, investments, protection and so on.
Getting improperly a piece of land or misleading titles are considered sever issues for our country.
The lands register recognizes the property right, it divides correctly the borders, the position, the neighbors, helping to establish the utility, the incomes and the right price of each lot.
The lands register is the most important economical and extra economical activity which it has as final movement the private land owner and such as: selling-buying, cooperation, matching, farming, closuring, leasing.
The lack of a lands register puts in difficulty the consolidation and the land property but also the lands selling.
However, in May the National Lands Register and Leasing program was released

the property.
For this reason, in case the state wants its power it balances in favor of the public properties. Although in the last few years, the area owned by the state is too small, for about 6% and it can overcome like it did across the history.

» The freedom of the territorial market

In the admission treaty to EU, there has been mentioned the freedom of the territorial market which it was enacted in 2014 in 17/2014 law.
Therefore, once with this law, the gates for the physical person can buy lands the same as the Romanian people without any restrictions.
Moreover, the law makes easier for the European investors in buying lands and they benefit of different lending conditions [2], lower interests what encourage and give them advantages against the Romanian investors who have priority in buying and excelling the preemption criteria from the law.

The freedom of directing the lands has a huge impact upon the well development of the territorial market due to the fact that the European buyers' resources overtake the Romanian farmers or even those living in the countryside.
In the past few years, the social-economical actions of the selling-buying farming lands from Romania, it happened by affecting the social and national security but also the globalization phenomena appeared recently [1] which cased the gap between sates.
These current actions of the foreigner buying farming lands cased sever conflicts due to the law-breaking which decreased the production quantity of the farmers.
One negative aspect upon the quality of the farming lands can be determined by not taking into account the structure of the production, the field system, the area or the environment.
There are also some possible issues on the social area because the small properties could disappear, the rural areas could be no longer inhabited and the poverty will grow due to the older habitants.
Therefore, the land shouldn't be given to those foreigners buying it but just giving the freedom of farming it. The real issue is that they could deploy their benefits to other countries.
Romania is the only country which didn't notify to EU [1] of restraining the foreigners in buying the lands. Therefore, 40 % of the farmed area is owned by the foreigners legally or not. However, at this amount we can count also those areas owned by the foreigners through the preemption law. What's really interesting is that Romanian people don't own a single land outside the borders, in EU. The other EU treaties leave to those countries the possibility of selling the lands in their country and it refers to the food safety of that state. So the selling of the lands is something national but not collective.

» Reduction of lands

Compared to other EU countries, in Romania there is the necessaries farming. It is clear the fact that the process of pooling the small farms should be encouraged. It will become as normal if the farming gets profitable, and farmers are going to look for a more advantageous environment.
A good way of developing the territorial properties is the farming of the areas which is something important for Romania where giving back the land and making the right of property 4,2 million village owners transferred the right of property and used the land[5], out of which 40% are over 60 years old and 30% are retired people. They carry on farming the land in order to provide their daily food or decent wages.
As a conclusion, this is way the farming has its important part in transferring the territorial recourses from the less active farmers to those efficient, and it will increase the productivity by the reduction of lands.

Conclusions

Considering the reasons brought by the specialists and those related previous we could line some points to be adopted:
- Full preemption to get the local or state lands;
- The lands wealth to remain in the state's property;
- Using national technical matters;
- Training the land buyers – foreigners;
- Considering the land as a national good;
- Simplifying the way of getting loans;
- Clarifying the farming properties by a land register.

The land selling stands as an agriculture

method which gave the right of territorial property. The farming reforms have as result the decreasing of the farming overboard by the small peasant farms because the owners weren't allowed to sell the lands for about 15 years which diminish the Romanian farming. After 1990, once with the market economy, Romanian agriculture had its own path. Once getting back the right of property and the buy-out of old state companies, Romania could have increase farming and could have assure the food safety of its population, being one of the top in Europe.

According to law no.18/1991, it allowed to tear down old companies and the division of lands by giving back to the previous owners. The land fragmentation is a huge issue for the technological progress of the agriculture because the farming won't have the financial capacity of investing in new tools although these are what we need.

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7.***Legea cadastrului si publicitatii imobiliare nr. 7/1996, modificata prin Ordonanta de Urgenta a Guvernuluinr. 41/2004, aprobata prin Legea nr. 499/2004.

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THE EFFECTS OF FOOD PRODUCTS ON THE HUMAN BODY

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Abstract: *The excess of food can cause a state of tiredness. The carbohydrates and the caffeine consume the nutrients that the body needs: vitamin B and calcium. In case we consume food that cases allergies a state of vertigo can occur. Lunch is the main meal of the day because the body needs more energy at noon then it does in the evening.*
A good source of energy are the seeds, the nuts and fresh fruit and vegetables. The green food like lettuce or spinach can offer a good quantity of beta-carotene; iron and protein. Do you want to have energy, to give up the often "unmotivated" tiredness that you have to deal with during the day? Do you intend to reactivate your reflex of early waking up?

Key words: *food products, carbohydrates, vitamin, protein, hypoglycemia.*

Introduction

The state of tiredness can have multiple causes, such as:
- nutritional deficiencies;
- allergies caused by the incorrect nutrition and by the polluting factors from the environment;
- adverse elimination of toxins from the body;
- lack of oxygen;
- stress;
- incorrect rest;
- circulatory insufficiency;
- hypothyroid;
- hypoglycemia;

The Encephalon can lose some of its oxygen refilling properties, in condition of superficial breath and a physiologic unfit posture maintained daily. The physical exercises are extremely important also during the period of tiredness.
These are fortifiers if they do not overstress the body.

That way, it is stressed out that the most recommended exercises are those performed with at least two hours before bedtime, so that they are not too stimulating.

Materials and methods

» Overfeeding can generate the tiredness

The food containing hot oils determines a person to slow down the rhythm of its activities. The sweet food and the caffeine can be a fast stimulant, but soon the state of tiredness generated by the fluctuation of glycemia values (sudden, successive increases and decreases). The glucides and caffeine wear out the body of the nutritive elements it needs, such as: Vitamin B and calcium.
In case we consume food that we are allergic to, a serious state of dizziness can develop (vertigos).
It is recommended to have an intrinsic food diary to register what you ate and how you felt that day. This might help you identify the

food allergies which affect your body.
The diary products, wheat, grout, citrus plants and corn are the main responsible, but according to the physiological particularities of the organisms, it could be any other food product.
By avoiding the allergies the energetic level of the body could be considerable improved.
Lunch is the main meal of the day because more energy is required in the afternoon than in the evening.
If you are overweight, you need to give up the extra weight because "bearing daily a lot of fat" is very tiresome.
The nutrition for a sustained energy includes pumpkin, sesame, wet and rinsed sun-flower seeds, nuts, almonds, fresh and raw fruits and vegetables.
The Green Food, such as – cabbage, spinach, violets, malve and dandelion, spirulina, chlorella, barley herb and wheat herb are loaded with nutrients such as beta-carotene, iron, proteins and clorophila, containing at the same time lots of oxygen.
Pollen can be added to the purees as a reminder of energy. If you are allergic to pollen, start somehow with small amounts (a bean per day) and increase the amount after a long period of time, up to a scoop a day.
The sea vegetables - marine algae that contain in addition to clorophila a red, brown or auburn pigment; such as dulse, varec and wakame constitute an excellent food for those who have a low function of the thyroid. Their mineral richness confer the sea vegetables a superior dietetic value. They are particularly rich in calcium, iodine and fortify, feed and rebalance the body.

Results and discussions

The researchers from the Biomedical Research Laboratories and the Research Glycotechnology in Japan discovered that when fucoidan, complex polysaccharide from wakame and kombu, was added to the cancerous cells in a bowl, they were destroyed in 72 hours [1]. For increasing the energy level of the body and the growth of vitality it is recommended:
- Sea lettuce - They can be used with everything. They contain: iodine, vitamin C and iron, as they are the most consumed vegetables in Europe
- Dulse - Can be used with everything, with a taste similar to the taste of Turkish walnuts. It is rich in proteins and vitamin A.
- Nori - It is one of the most consumed vegetables in the whole world and it is used for cooking the famous sushi. It contains all the essential amino-acids.
- Wakame - It it rich in proteins and balanced in amino-acids. In present, it is the only sea vegetable that comes from the aquatic culture in France.
- Kombu - This sea vegetable is the richest in iodine. Added to dry vegetables, it can reduce the cooking time with almost 1/3. In the traditional Japanese cuisine, kombu is cooked with beans and legumes to make them more digestable.
- Ashwaghanda root (Withania samnifera) - It cures the lethargy and tiredness, facilitates the studying and the memory, it is an adaptogene, as it help the body adapt to the daily physical and emotional stress.
- The Cauliflower Root (Codonopsis pilosula) - Is the nourishing tonic for the spleen, blood, lungs, stomach and pancreas, being often referred to as " the poor man's ginseng".
- The Dandelion Root (Taraxacum officinale) - Stimulates the production of bile, improving the function of the liver. It improves the digestion and grows the vitality.
- Ginkgo Biloba – Helps the brain use the oxygen better, improves the memory and

peripheral circulation. It is an excellent antioxidant, tonic for the kidneys and revitalizing.
- Ginseng (Panax Ginseng) - Removes exhaustion and helps the body fight: stress, suprarenal exhaustion, tiredness and beneficially intervenes in post-surgery recovery. Ginseng is an adaptogene, ki tonic, digestive tonic, immunostimulant, refreshing.
- The Licorice Root (Glychyrriza glabra) - Is naturally sweet, helps normalizing the blood sugar level and hydrates the overcrowded renal glands. Licorice is nutritional and revitalizing.
- The Schizandra forest fruits (Schisandra chinensis) - Improve the resistance of the body and represent an excellent antioxidant. They fight the tiredness and insomnia. Schizandra is regarded as an adaptogene, brain tonic, immunostimulant, tonic for kidneys and liver, refreshing.

» The leaves of dahlia, florae and forest fruits (Crataegus sp.) help eliminating the deposits of fats in the blood, and gently dilate the capillaries, so that the heart can function efficiently. The dahlias improve the peripheral circulation and the ability of the body to use oxygen. It is appreciated that it is very important to [2]:
1 Reduce exposure to chemicals.
2 Test the water and think about getting yourself a water filter or use bottled water.
3 Prevent the appearance of infections through avoiding fatigues, exhaustion and fast-food.
4 The massage removes stress, improves the circulation and the lymphatic drainage.
5 Have regular sleeping and waking up hours. If you sleep during the day, sleep at regular intervals. Try to establish a rhythm.
6 Avoid drinking before bedtime so you would not have to wake up to urinate. If it helps, put dark curtains in your room. The ear muffs can also contribute to ensuring a restful sleep.
7 Establish a few specific purposes for every day and write them the night before.
8 Plan your most difficult tasks during the day, when the energy is greater.
9 Add "color" to your life. The red, light pink, and orange tones, either worn or used as setting will help cheer you up. During the day allow the sun to enter the rooms!
10 When you have to carry out difficult tasks, a little optimist music can be motivating.
11 After the shower with hot water appeal to a short shower with cold water.
Try to spray on the face some cold water lightly perfumed with pure mint oil (20 drops of essential oil for 8 measures of water) several times a day.
12 Keep your brain stimulated reading different articles that create you a psychical comfort.
13 Think positively.
14 Try to rest efficiently. Sometimes all you need to refresh yourselves is a "nap".
15 Take time to make healthy things for yourself every day! [2].

» A vision on violets [1]
Viola odorata (Violaceae Family) originated from western Asia and Europe but it is widely cultivated and naturalized. This perennial plant, evergreen, grows about 6 inches high and has heart-shaped leaves (Figure no. 01). The flowers are purple, pink, lavender-colored or white. Although the flower blossom early in the spring, the real seed producing flowers is unnoticeable and comes out in the autumn.
Do you know that spring is close if you can feel a breeze of violets?
In mythology, Zeus adored a young beautiful girl named Ione (hence the name of viola). His wife, Hera, was jealous and turned Ione

into a white heifer. Violets were created by Zeus to offer Ione a beautiful present.
Persephone, the daughter of the Goddess Demeter, was picking up violets when she was kidnapped to live in the world of shadows. Athens was once known as "the city of violets".

Fig. no 1 Viola odorata (Violaceae Family)
(Source: https://upload.wikimedia.org; http://americanvioletsociety.org/)

The leaf and the flower have been used for centuries for their antifungal properties, anti-inflammatory and antiseptic properties.
Violets were used for treating: spots, fury, asthma, bronchitis, cold, eczemas, fever, chest disease with fibrocystics, pain, headache, heartache, lymphatic congestions, mastitis, mumps, psoriasis, scurvy, neck pain, ulcer, infections of the urinary system, varicose veins and convulsive cough. Put a rag moisture in leaves tea or violet flower on the back of the neck to treat the headache. The flowers are eaten for ensuring a fresh breath.
The flower essence of the violets helps those who feel lonely, even if they are surrounded by others. It fights against anxiety and facilitates communication [1].
As long as the leaves have the shape of a heart they are good for eating, raw, in salads. The flowers can be eaten and they constitute a great garnish. Freeze the flowers in water in trays for ice cubes, thus offering a note of elegance. The violet sorbet, puddings, and sugared violets are sweet delicacies. The violet tea is often prepared from leaves.
The ancient Greeks wore violet crowns to promote serenity and sleep. The Romans planted violets on the tombs of their children. The violets are regarded as a symbol of innocence and modesty. Violet is the flower of the state of Illinois, New Jersey, Rhode Island and Wisconsin. Violets are worn to bring prosperity.
The violet leaves and flower contain beta-carotene, vitamin C, salicylates, flavonoids, mucilage.
The Violets are acrid, bitter, and sweet, refreshing and hydrating and, according to Venus, element of water. The tea made from the leaves of violets can be used as a replacement for babies' aspirin [1].
In gardening, the violet flowers are used as fertilizers. Some people hydrated the corn seeds in the cold tea of violets to prevent the damage of insects during germination.
In the garden, violets produce nectar for early butterflies. The plant prefers total to partial shade and a soil which is rich in organic matter.

Conclusions

The food containing hot oils determines a person to slow down the rhythm of its activities. The sweet food and the caffeine can be a fast stimulant, but soon the state of tiredness generated by the fluctuation of glycemia values (sudden, successive increases and decreases). The glucides and caffeine wear out the body of the nutritive elements it needs, such as: Vitamin B and calcium.

In case we consume food that we are allergic to, a serious state of dizziness can develop (vertigos).

It is recommended to have an intrinsic food diary to register what you ate and how you felt that day. This might help you identify the food allergies which affect your body.

The diary products, wheat, grout, citrus plants and corn are the main responsible, but according to the physiological particularities of the organisms, it could be any other food product.

By avoiding the allergies the energetic level of the body could be considerable improved.

Lunch is the main meal of the day because more energy is required in the afternoon than in the evening.

If you are overweight, you need to give up the extra weight because "bearing daily a lot of fat" is very tiresome.

There are over 100 species of Viola. Many of them are perennial, but some of them are annual. Viola tricolor, also known under the name of Pansy, is also eatable and is one of the most well-known [1].

» The Violet Vinegar

Put as many flowers as possible in a jar. Cover with vinegar from white wine, put on a cork and leave it 30 days to ferment, shaking them daily. Keep the jar in the fridge.

» The Violet Honey

In the spring, gather two mugs of violet flowers. Mix a cup of raw unfiltered honey and the juice from a lemon. Store the product in a glass jar in the freezer.

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THE RISK MANAGEMENT AND THE INSURANCE IN ROMANIAN AGRICULTURE

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Abstract: *In Romania people involved in agricultural activities have become aware of the importance of the insurance in their work. This shows interest to analyze the current state of this economic branch and the risks they are facing. The most important aspect to consider is creating a structure whose subject of activity should be risk management in agriculture.*

Key words: *insurance, risks, policy.*

Introduction

There were made several researches by the scientists along the history due to discover first insurance traces which hadn't had clear results. The only actual proves are those spread risks operations which date back in time with the first forms of organizing the marketing. The insurance is based on an understanding, a contract where one side (insurer) takes a commitment to the other part (the insured) in case of lose for an amount of money called bonus.

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Materials and methods

In the future, the increasing of social-economical activities, the variation and the arrival of new insurance objectives, the enhancement of the already known risks effects and the urgency of new ones led in building and bursting the insurance market, not only worldwide but also European [1].

The insurance growth has been ant it will constantly reflect the economical increase or moreover the human need for protection [2].

There are two types of insurances due to their form or risks:

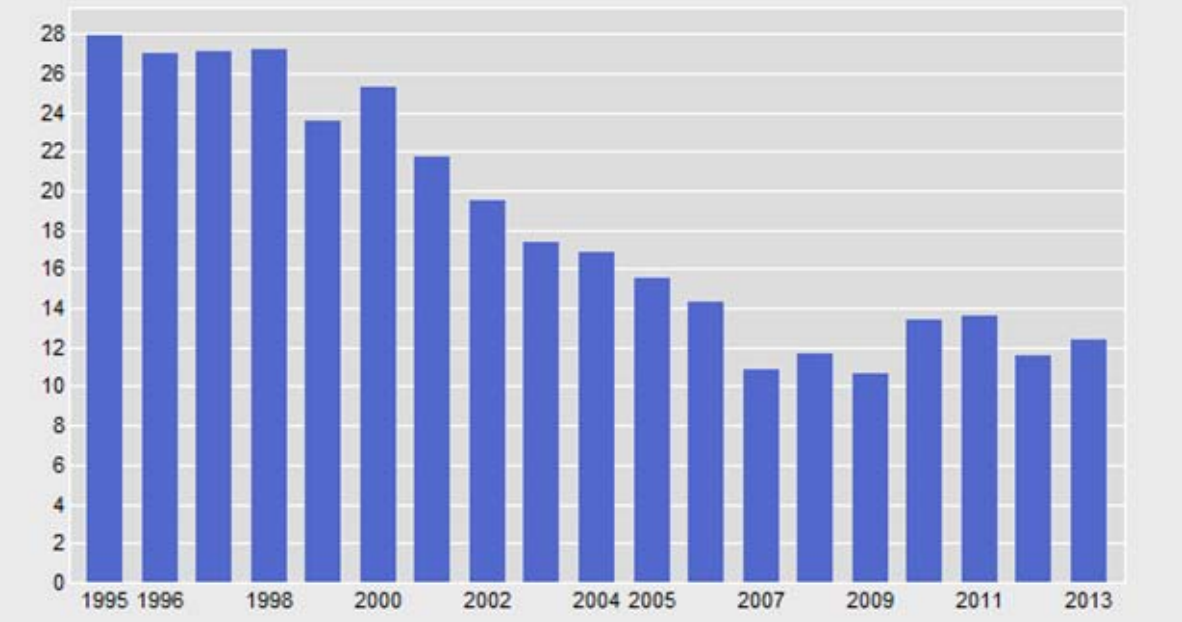
- Life insurance;
- Non-life insurance (general).

Since the agricultural production was the key in rising the national GDP, their insurances are the beginning of new studies and researches in the management of risks, nevertheless the insurances are seen as decreasing the risk [1, 2].

In Romania, the weight of the agriculture has fallen four times in the past two decades, being on a minimum historical scale.

The drop from the above figure is normal because once the economy rises from one undeveloped to another on progress, the weight of the agriculture falls and of the industry rises (Fig. no. 1).

Ways of insurance in agriculture had been before 1989 and after this period. In the communist regime, agriculture was divided



Source: Romanian National Institute of Statistics

Figure no 1 - The percentaj of agriculture in the economy (1995 □2013)

in two big sectors, one co-operative which owned the largest area and another of the state which led just 2 mil ha.

Therefore, there were two different protections of the farmers: ADAS dealt with the CAP insurance, feeing less but with good organized ways of insurance, inspired from the orient, and meanwhile for the state companies there weren't insurances. The society which dealt with the damages was the State Agriculture Department from the Agriculture Ministry.

By 1989, ADAS was divided in three societies: ASIROM, ASTRA and CAROM, but the agriculture insurance were last left on the market. The international insurance transactions are ruled by the international and national laws of each country. However, inside UE, European Laws that are written and those which are about to be out, such as Solvency II- they will have a big impact on the insurance or reinsurance market, on the required capital, or either on the products and their prices. Moreover, in crises, they will have been checked and servile [3].

Therefore, once with the admission to EU, the readjustment to European specifications and laws has been implemented in order to adhere.

However, the need to sign an insurance policy was as a well known through farmers who wanted to place the risk on the insurance shoulders. We could identify the following agricultural insurance structure:

- fields insurance;
- animals insurance;
- farmer insurance.

We should also mention the state finance given once with 2010 as the percent amount of the taxes paid by the farmers, such as:

- 70% for the policies in case of weather-bound losses which can be considered as natural disasters;
- 50% for the policies in case of either weather-bound losses which can be considered as natural disasters, but also other weather-bound losses or animal-plants disease.

Results and discussions

Nowadays, this type of finance is given differently. Romania deals itself with two major problems in the agriculture sector, that are the exposure at natural disasters and the non-compliance with certain technologies of working the land making human mistakes.
From the above mentioned risks the most important are:
- The production risk - which can be produced due to the weather-bound and influence the quantity and quality of the final product;
- The market risk – which is due to the product price, the loan, the exchange rate and the capital placement risk;
- The financial risk – which can be due to loans taken by farmers instead of supporting themselves through the obtained production;
- The human risk - which is because of the people involved in the agricultural activity.
In order to manage these risks, we could identify some actions that the insurance companies should take into account in their management of risk:
- Farmers 'protection to get sufficient subsides/incomes;
- Weather-bound insurance;
- The agricultural subsidies should sustain/ protect the farmers' budget concerning the insurance finance;
- The insurances should take into account the market volatility;
- The fees of the insurance subsidies should be counted for each risk and in accordance with the management of risk.

Conclusions

There are some proposals to stimulate and increase the agriculture insurance:
- Coming up with a new structure in order to have as key point the management of risk in agriculture;
- Giving insurance according the weather-bound;
- Insurance subsidies in case of weather-bound;
- Requesting protection of the subsidies once with the insurance enclosure;
- Using reinsurances in case of weather-bound;
- Achieving European finance to guarantee a certain level of the loan damage.

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COW MILK PRICE VOLATILITY – AN ANLYSIS FROM THE ROMANIAN AGRI-FOOD SUPPLY STABILITY PERSPECTIVE

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Abstract: *The EU milk market is at present in an unfavourable situation, as revealed by the average milk price (August 2015) of 29.30 euro/100 kg, lower by 20.5 % than in August 2014 (36.87 euro/100kg) and August 2013 (36.86 euro/100kg). In Romania, the average milk price also decreased, from 29.06 euro/100kg (August 2014) to 22.84 euro/100kg (August 2015), being the lowest milk price in the EU-28 member states. The milk market perspectives are linked to the capacity of the EU regulatory framework to manage the extreme market volatility episodes and to manage an eventual crisis situation after the removal of milk quotas, mainly with a view to ensure a balanced evolution of milk production throughout the European Union and to avoid an extreme concentration in the most productive areas. In order to determine price volatility I used monthly time series of average cow milk procurement prices, in the period January 2005 – June 2015, calculating the variation coefficient, as a ratio of standard deviation to the average, making it possible to identify the dispersion points. The information source was represented by the official data published by the National Institute of Statistics (NIS), Tempo-online database.*

Key words: *milk price, variation coefficient, volatility*

Introduction

The objective of the European Union in terms of food safety is to protect its consumers, while guaranteeing the good operation of the single market; this policy is based on the traceability concept, both of entries (feedstuffs, for instance), and of exits (e.g. primary production, processing, storage, transport and retailing).

Maintaining the milk quotas at EU level contributed to the control of raw milk price variability. On the other hand, the quotas, together with the export restitutions, the tariff protections and the public interventions in general facilitated the maintenance of a gap between the world and the European prices, so that the domestic price volatility could be controlled [1]. The current level of European prices much more linked to the world prices, expose producers to a higher price volatility, and consequently to uncertainty with regard to profit margins on the medium term. Taking into consideration the risk, certain producers might decide not to make investments any longer or even to exit the business, considering the uncertainty related to incomes. According to the European Commission Communication, the agricultural commodity prices, in general, will feature higher volatility in the next period, out of the following considerations:

- climate changes that affect the level of production [2];
- higher correlation between the prices of the entire agricultural sector (biofuels for instance);
- increased integration of the world financial market.

Besides these, other new causes could emerge in the near future, such as uncertainty with regard to the future of reforms, which makes it difficult to quantify the increase of agricultural prices volatility.

Materials and methods

In order to determine price volatility, we used monthly time series of the average procurement prices and selling prices on the peasant markets for cow milk, in the period January 2005 – December 2014, calculating the variation coefficient, indicator that expresses the volatility level of the markets for these commodities.

The variation coefficient was calculated as ratio of the standard deviation to the mean, making it possible to identify the dispersion points [3]. The higher the variation coefficient the higher the dispersion and volatility of prices. The information source was represented by the official data published by the National Institute of Statistics (NIS), through the Tempo-online database.

Results and discussions

Although cattle raising is a traditional activity for the population in the rural areas and mainly in the mountain area of Romania, the accession to the EU in the year 2007 has not brought about the revigoration of the milk sector, on the contrary, the sector experienced a strong decline of production and of dairy cow herds.

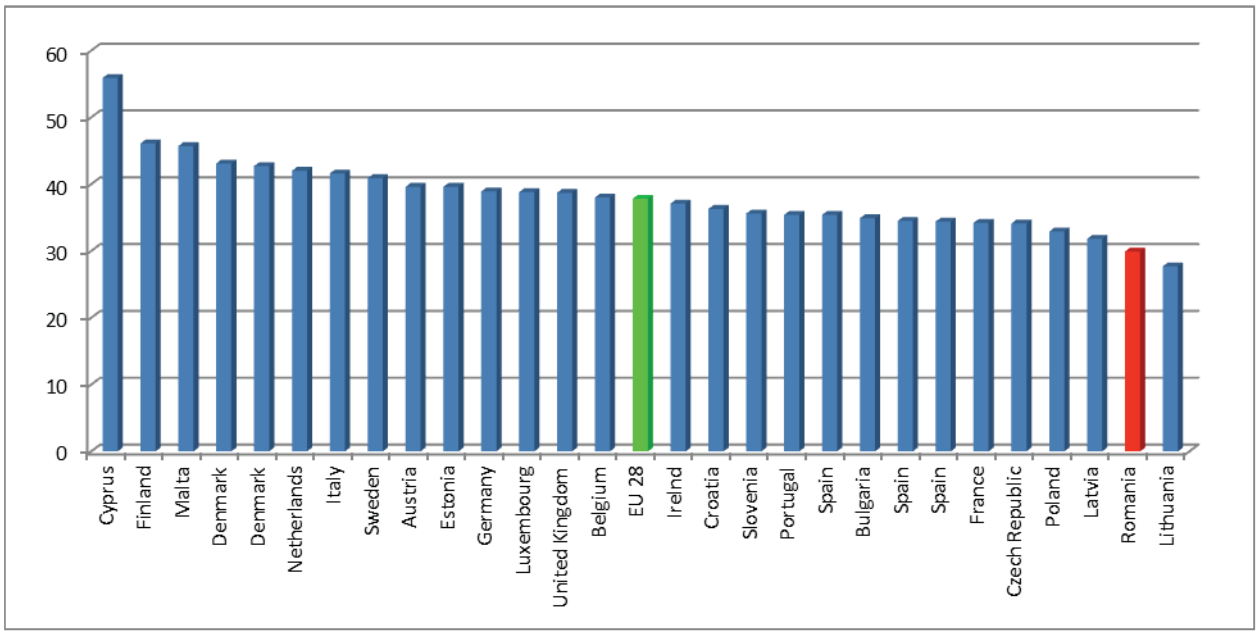
Milk sector performance in Romania is seriously affected by the low average yields per cow head compared to the developed countries of the EU as well as by the excessive fragmentation. Thus, in the year 2013, the average yield per cow head of 3490 kg/cow head in Romania represented 53% of the EU-28 average (6590 kg/cow head). As regards the average farm size, this was 2.14 heads/farm in 2014, compared to 42 heads/farm – EU-27 average, or over 100 heads/farm in Denmark, Czech Republic and Cyprus. We can also add that 52 % of the total dairy cow herds are raised on very small-sized holdings, with 1-2 heads each. Out of total 655541 farms, 84.4 % (553531) have 1-2 heads and only 2042 farms (0.16 %) are considered professional farms that deliver milk directly to dairy factories.

The raw milk price paid to farmers generally decreased in most European countries in the second half of the year 2014 and in the first months of 2015 (Figure 1).

In EU-28, the average price was 30.48 euro/100 kg in May 2015, by 19% lower than in the month of May of the previous year. However, there are significant differences between the member states, with regard to the monthly evolution of prices in the period 2014-2015. Thus, there is a more consistent price decline in the Baltic countries (under 25 euro/100 kg), which is also the situation for Romania; the decline was less significant in Finland, Italy, Austria, United Kingdom, France and Portugal (under 30 euro/100 kg).

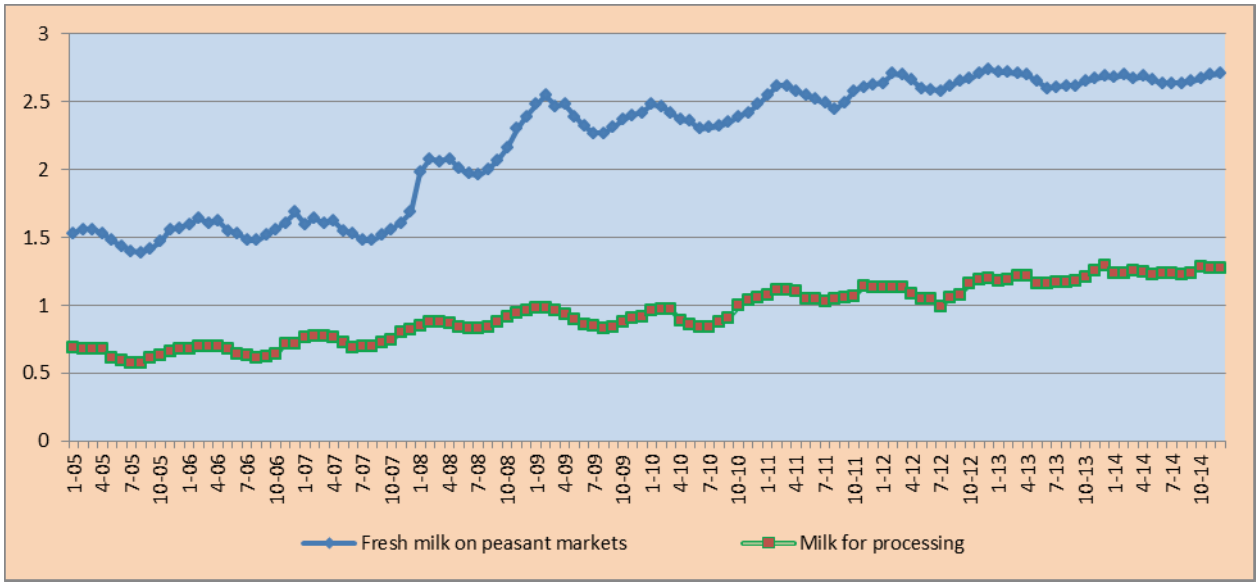
The analysis of the evolution of average milk procurement price and of the selling price of milk on the peasant markets in Romania, in the period January 2005-December 2014 reveals an increasing evolution for both milk prices. However, we can notice a higher increase of fresh raw milk price sold on the free market in the period 2008-2009, when the feed crisis significantly influenced the increase of prices (Figure 2).

In order to determine the volatility of average procurement prices (farmgate prices) for the raw cow milk and the fresh liquid milk sold on the peasant markets, we calculated the variation coefficient as ratio of the standard



Source: DG AGRI, Milk Market Situation, European Commission, Brussels, July, 2014

Figure 1 - Raw milk price □EU-28 □May 2014 □euro/100 kg

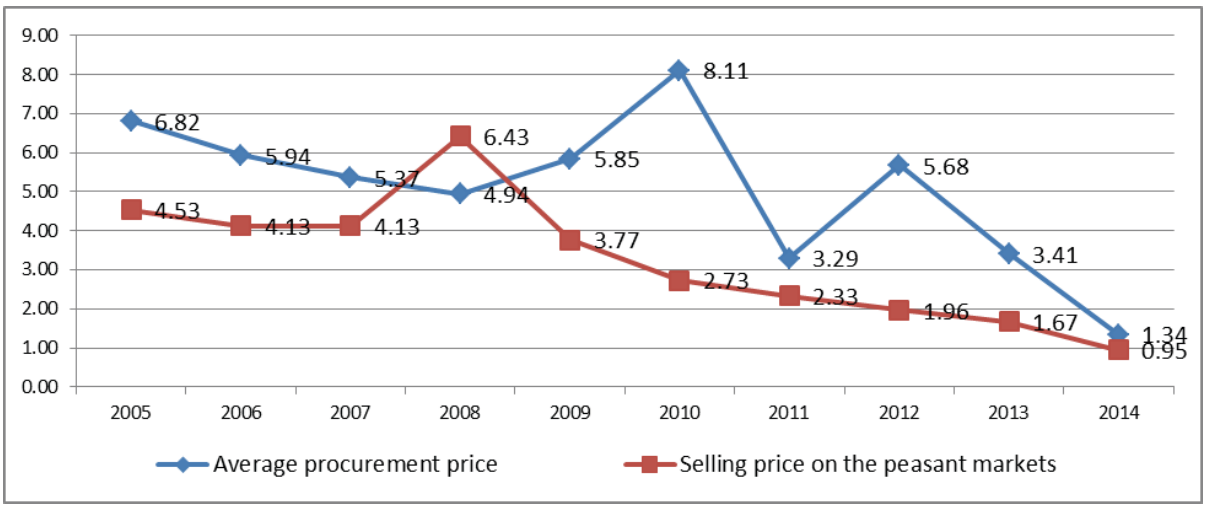


Source: Tempo-online, Romanian National Institute of Statistics

Figure 2 - Evolution of cow milk prices □January 2005-December 2014 □RON/litre

deviation to the mean. As it can be seen in the table below, there are significant differences both between the variation coefficients of these two types of milk, as well as within each type of analyzed milk. In the case of milk deliveries to processing, the variation coefficient had a fluctuating evolution in the period 2005-2014, ranging from 8.11 in 2010 to 1.34 in 2014 (Figure 3).

This situation can be explained by the fact that in the year 2010 the procurement price significantly fluctuated, mainly in the second half of the year. High values of variation



Source: own calculations Tempo-online, Romanian National Institute of Statistics

Figure 3 - Variation coefficient of cow milk

coefficient were mainly found in the first part of the investigated period, i.e. 2005-2010, when the curve has an ascending trend. In the year 2011, compared to the previous year, we could notice a significant decrease of the variation coefficient by 60% (from 8.11 in 2010 to 3.29 in 2011), as a result of price stability throughout the year 2011. The year 2012 was also characterized as a fluctuating year in terms of procurement price values and that is why the variation coefficient increased compared to the previous year to 5.68 (72%).

As regards the price of the fresh liquid milk sold on the peasant markets, even though we can find that this is higher than the average procurement price, the calculation of the variation coefficient indicates a much less volatile market. Generally, after 2008, when the variation coefficient reached the highest value in the investigated period (6.45), the trend was diminishing, so that in the year 2014 the variation coefficient reached its lowest level (0.95).

The conclusion is that in the case of fresh milk sold on the peasant markets, there was a higher price stability, compared to the milk delivered to processing plants.

Conclusions

Agricultural commodity price volatility is influenced by the volatility of crop production; the more dispersed and volatile the crop production, the more volatile the agricultural commodity prices.

In the case of fresh milk sold on the peasant markets, there is a higher price stability compared to the average procurement price to processing plants, through the variation coefficient. The milk sector role in maintaining the viability of rural communities should be evaluated both in terms of socio-economic development, as the milk sector has a great importance for the areas with poor economic opportunities as well as from the point of view of environment protection, as a result of the intensive development of milk production.

The possible impact after the removal of milk quotas in April 2015 may be different. In those areas where milk is produced at low production, transport and collection costs, competitiveness will be stronger. In this case labour employment level will be higher throughout the chain. By contrast, the

farmers from the countries confronted with high costs might have a lower production, many of them might exit from the market and the labour employment level would be lower.

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EVOLUTION TRENDS OF ROMANIA'S AGROFOOD FOREIGN TRADE AND CHANGES IN EU-27 CONTEXT

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Abstract: *The research aims to analyze Romania's contribution to the European Union's agriculture, after joining the EU, compared to the pre-accession period, addressed from the perspective of key sector-specific statistical and synthetic indicators, with an introspective focus on the review of agrofood foreign trade trends and changes. The results highlight the main aspects regarding the structure of trade flows and external trade balance of the products aggregated by the main sections of the combined nomenclature.*

Key words: *agrofood sector, trade, European Union.*

Introduction

The general trend in the global trading system of gradual transition to an open market is a desirable process in the larger context of the sustainable development. However, among the countries joining the European Union in 2007, Romania is the state which has faced increased competitive pressure in the agro-food sector.
The research aims an analysis of Romania's developments within the EU's agriculture in the period 2007-2013, following the accession, compared to the previous period, 2001-2006, from the perspective of key statistical and synthetic sector-specific indicators, focusing introspective tendencies and changes in the agrofood foreign trade.

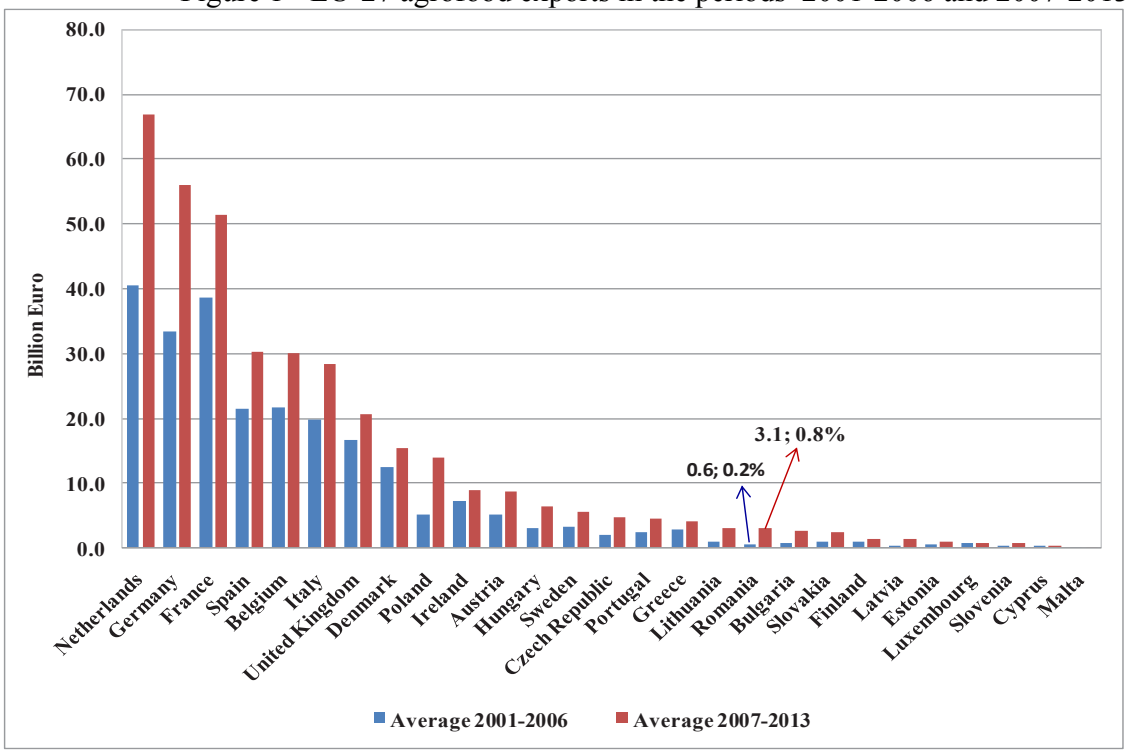
Materials and methods

The research was used statistical methods of analysis and synthesis in foreign trade results based on assessments of relevant indicators by comparing the periods prior and following Romania's accession to the EU. The results highlight the main aspects regarding the structure of trade flows and external trade balance by the product groups 01-24 aggregated in the key sections of the Combined Nomenclature (CN).
The material used statistical sources provided by Eurostat database and national documents produced by the National Institute of Statistics, i.e. the Romanian Statistical Yearbook and the Statistical Bulletin of International Trade nr. 12/2013.

Results and discussions

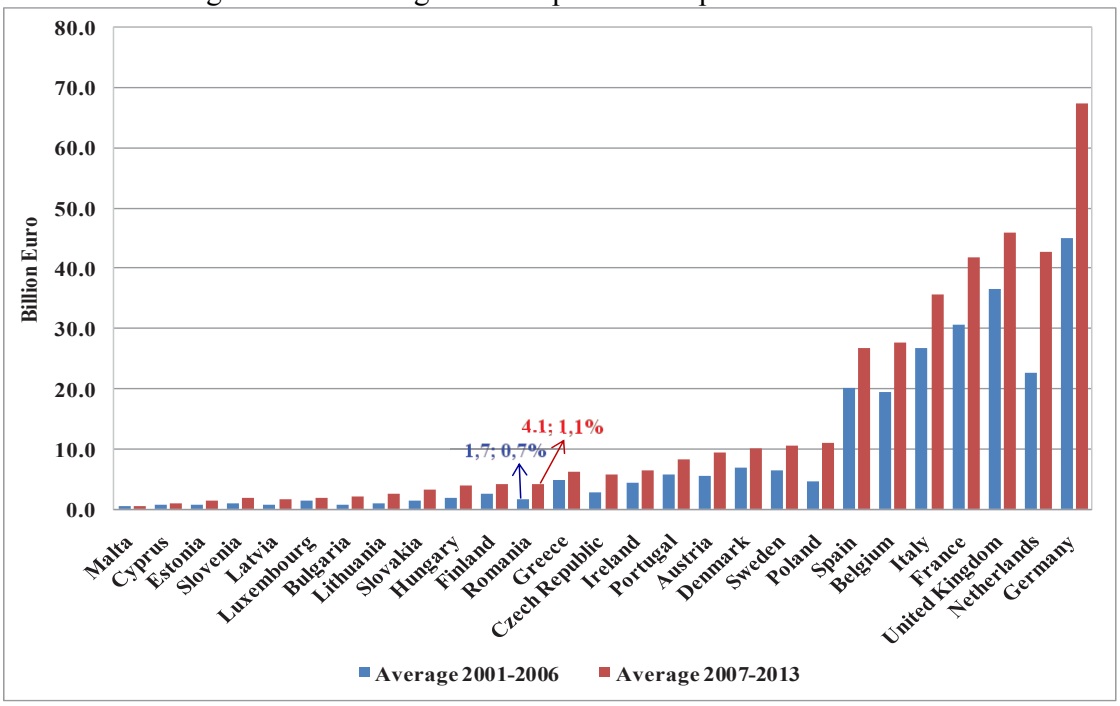
The evaluations indicate that Romanian agriculture's contribution to the gross value added of the EU-27, of 4.7% in 2013, accounted 7.7 billion Euro, as a result of a 5.7% share in the vegetable production value of the EU and of 2.3% share in the value of the animal production. Cumulatively, Romania has contributed with 3% to the total value of the EU-27 agricultural production by the crop production and with 1% by the livestock production[1].

Figure 1 - EU-27 agrofood exports in the periods 2001-2006 and 2007-2013



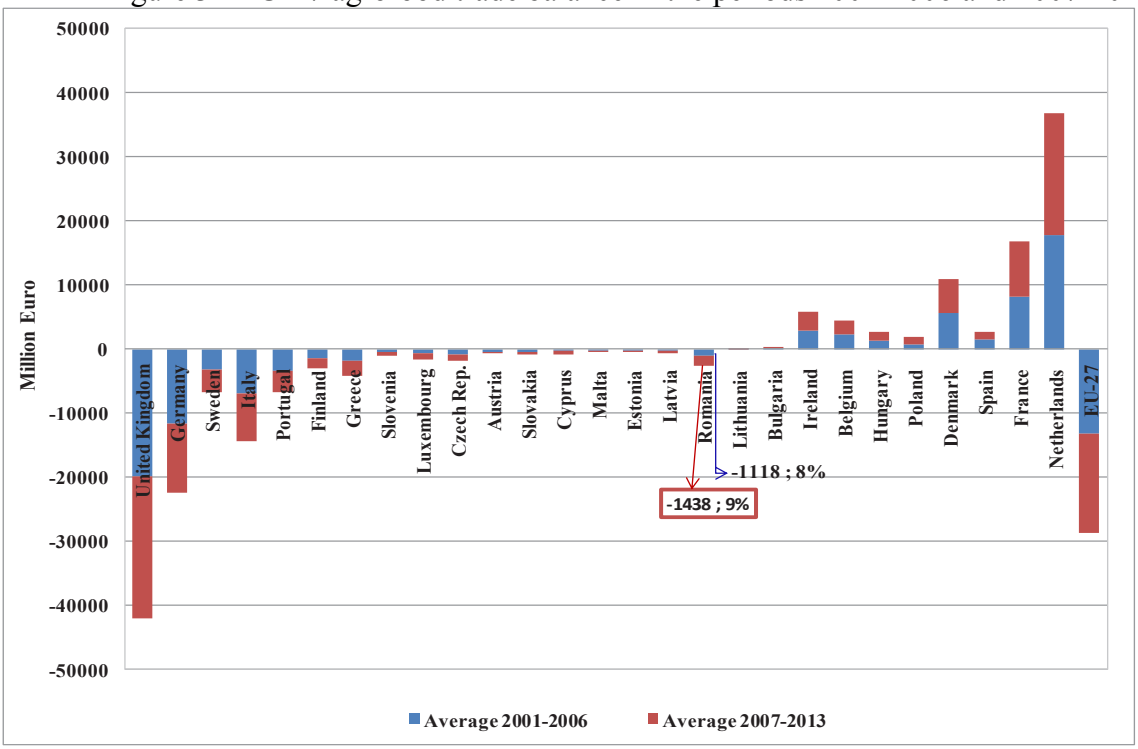
Source: M.A. Rusali, processing of Eurostat statistics.

Figure 2 - EU-27 agrofood imports in the periods 2001-2006 and 2007-2013



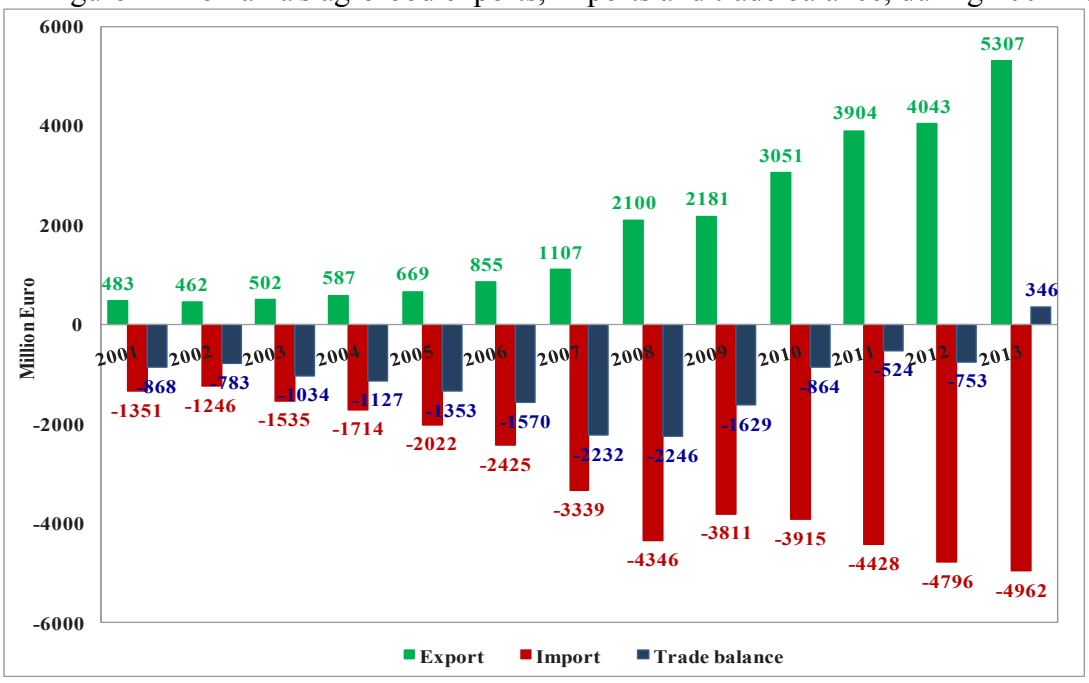
Source: M.A. Rusali, processing of Eurostat statistics.

Figure 3 - EU-27 agrofood trade balance in the periods 2001-2006 and 2007-2013



Source: M.A. Rusali, processing of Eurostat statistics.

Figure 4 - Romania's agrofood exports, imports and trade balance, during 2001-2013



Source: M.A. Rusali, processing of NIS statistics.

Table 1 - Structure of Romania□s agrofood trade, by sections of CN, during 2001-2013

	I □Live animals and animal products			II □Vegetable products			III - Vegetable and animal fats and oils			IV □Food products, beverages and tobacco		
	Export	Import	Trade balance	Export	Import	Trade balance	Export	Import	Trade balance	Export	Import	Trade balance
2001	146	-314	-168	202	-375	-174	28	-38	-10	108	-624	-516
2002	153	-312	-159	188	-294	-106	10	-70	-60	111	-569	-458
2003	189	-261	-72	174	-596	-422	28	-55	-27	111	-623	-512
2004	200	-389	-189	208	-543	-335	64	-52	12	115	-730	-615
2005	195	-662	-468	274	-437	-163	62	-59	4	138	-864	-726
2006	211	-707	-496	408	-538	-130	57	-74	-17	179	-1106	-927
2007	248	-870	-622	436	-1037	-601	67	-144	-77	356	-1288	-932
2008	261	-1191	-930	1157	-1259	-102	106	-227	-121	576	-1669	-1093
2009	313	-1108	-795	1092	-998	94	87	-160	-73	689	-1544	-855
2010	416	-983	-568	1606	-1138	469	162	-217	-55	867	-1577	-710
2011	562	-960	-398	2027	-1322	706	240	-246	-6	1074	-1900	-826
2012	728	-1035	-307	1971	-1418	553	183	-239	-56	1161	-2104	-943
2013	747	-1118	-371	3004	-1458	1547	240	-208	32	1316	-2179	-862

Source: M.A. Rusali, processing of NIS statistics.

A small contribution of Romania's agrofood products share to the total EU-27 exports amounts has been shown, i.e. of 0.8% in the post-accession period, and of 1% in imports, whereas during the entire period 2001-2013 the trade flows had a growth tendency, especially those of exports (Fig. 1; Fig. 2).

In the year 2013 the market share of Romanian agrofood exports to the EU recorded the highest value of the analyzed period, of 1.2%.

Romania's agrofood trade has registered a positive balance of 346 million Euro, an unique performance achieved in the last quarter century following 1989, when the agrofood sector produced a net trade income amounting 139 million Euro.

Although had significant deficits, amounting an average of -1.1 billion Euro within 2001-2006, and widened to -1.4 billion within 2007-2013 (Fig. 3), Romania's agrofood trade balance performed a balancing trend during the whole period (Fig. 4).

During 2001-2013, Romania's agrofood exports increased 11 times, while imports grew 4 times. During this period, the total agrofood trade of Romania amounted 65 billion Euro, of which 23% deficit.

The evolution and structure of the agrofood trade groups of products aggregated by the sections I-IV of the CN, indicating values of flows and trade balance, are explicitly indicated in Table 1.

The main contributions to the trade deficit have had the products from the section IV- Food, beverages and tobacco, with a share of 44% in import and cumulating -862 million Euro in 2013, followed by products in the section I - Live animals and animal products, which shared 30% in imports, resulting a deficit of -371 million Euro.

The section III - Vegetable and animal fats and oils, although deficient in most years, had the smallest share in commerce, of 5%, but an upward trend in export value, recording a positive balance in 2013.

Romania's exports were mostly supported by the section II - Vegetable products, sharing 49% and being the only section that brought a trade surplus in the period following the year 2008 and which brought the positive agrofood trade balance reached in 2013, amounting to 1.5 billion Euro. The next important share in exports, of 29%, have had the products included in the section IV - Food, beverages and tobacco.

On the other hand, the agrofood imports had a lower annual growth rate, of 11% during 2001-2013, increasing from 1.3 billion Euro to 4.9 billion Euro, but with comparable high values of all products. Food, beverages and tobacco products systematically had the highest import values, occupying, in average, 43% of Romania's food imports in the period under review, albeit with a slight tendency to fall after accession.

In contrast, with larger fluctuations and a growing trend, the section II - Vegetable products is the next section with significant imports, of 28% in average over the period, close to which was the section including Live animals and animal products, with an average share of 25%.

In the same period, the exports of basic agricultural commodities dominated, increasing from 289 million Euro, in 2001, to 3.3 billion Euro, in 2013 [2]. The main Romanian food products which have performed during 2001-2013, achieving net revenues from exports, have been recorded only in cereals, oilseeds and livestock and processed products from chapters tobacco and other vegetable products.

In 2013, due to exceptional grain yields, but also to the products in the chapters including tobacco, fats, meat and other vegetable and plaiting products, which represented 32% of exports, the net trade income cumulated 2.5 billion Euro, due to the contribution made by the stated products.

Conclusions

During the period of time 2001-2013, Romania's total agrofood trade accounted for 65 billion Euro, of which 23% deficit, while the exports increased 11 times and imports increased by 4 times. In 2013, Romania ranked after the first 10 Member States net exporter of food products. Romania's agrofood trade balance, although encountered significant deficits, had evolved with a balancing trend in recent years post accession.

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EVALUATION OF THE STUDENTS PROFESSIONAL TRAINING UNDER REAL PRODUCTION CONDITIONS USING THE S.W.O.T. ANALYSIS METHOD

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Abstract: *The purpose of this paper is to assess the training of 140 students who performed in real specialty practice in the field of food engineering. The students were the direct beneficiaries of the EU-funded project "The best future on labour market"(POSDRU Contract /161/2.1./G/142009), having as main objective to encourage continuing education and helping students insertion into the labour market.*
The selected students received free individual counseling, group counseling, coaching for professional vision to facilitate training, development of leadership skills, encouraging teamwork and practical training internships. The obtained data were pooled and interpreted using the SWOT comparative method principles (Strengths, Weaknesses, Opportunities and Threats), the opportunities and threats representing the students' adaptation and integration into the team and their performances under real production conditions.
Finally, the research team issued recommendations to improve the performance of the teams of students from the "Food Engineering" domain.

Key words: *internship, SWOT method, students evaluation, food engineering.*

Introduction

This scientific paper was performed within the project "The best future on labor market" (POSDRU/161/2.1/G/142009), project funded by the Human Resources Development of the Sectoral Operational Programme with a total value of 2.171.375,00 lei (500.000 EURO), the amount of the grant being of 98% of the total project value.
Within the project, the Association of Young Farmers is intended as beneficiary and Bioterra University is intended as Partner 2, together with Siveco România S.A. (Partner 1). This quality allows Bioterra University to educate students acccording with the current market development needed on the labour market.

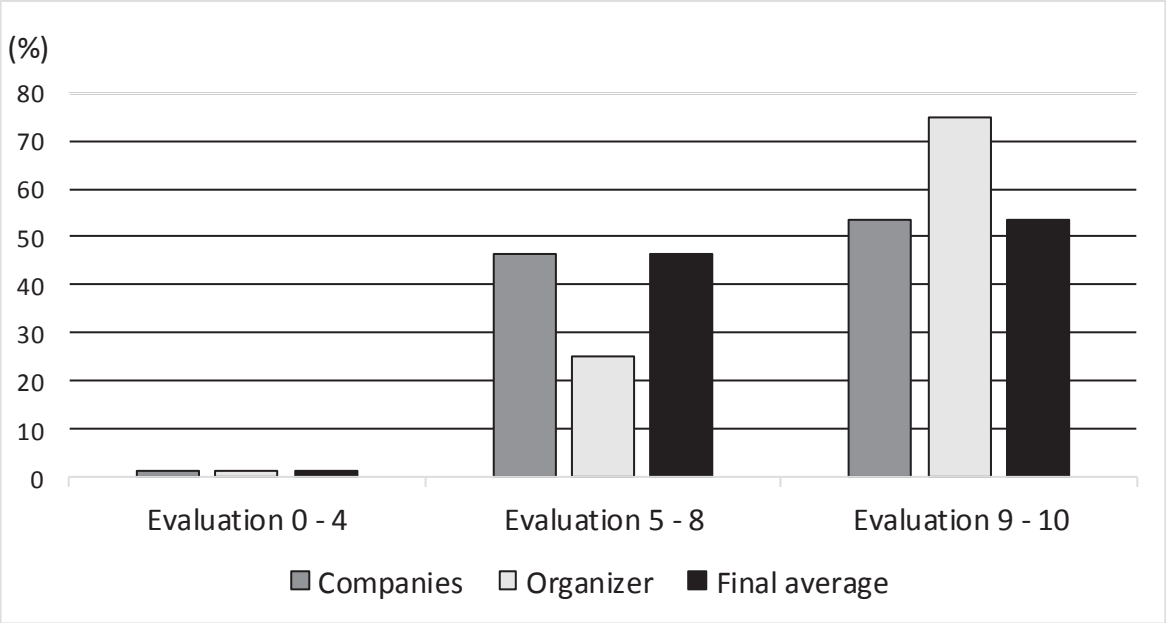
The project was developed over a period of 18 months (9 May, 2014 – 9 November 2015) and was addressed to a target group of 360 students benefiting from individual career counseling, and 140 of them were able to perform a practical training under real production conditions working in establishments relevant to their training (http://www.tineriifermieri.ro/).
The skills acquired by the students of the target group was conducted in compliance with the actual legislation on equal opportunities and treatment between women and men in employment.
They took into account all policies and practices of discriminatory criteria such as: any distinction, restriction or preference,

irrespective of: race, nationality, ethnicity, language, religion, social status, beliefs, gender, sexual orientation, age, disability, non-contagious chronic disease, HIV infection, belonging to a disadvantaged category
(Law no. 258/2007 regarding the pupils/ students practical stage, Law M.E.C.T. no. 3955/2008).
In assessing the skills and knowledge acquired by students, It was taken into account the rating granted by the company where the practical stage was developed and also the rating given by the tutors; between the two marks/grades can't exist a difference of more than two points.
The ratings were classified and analyzed on three scoring levels: grades between 1.00 and 4.99; scores between 5.00 and 8.99; scores between 9.00 and 10.00 (Galan C. et alea, 2014).

Materials and methods

The 140 students who agreed the practical training under real production, had opted 6 production companies, namely: S.C. LABORATOARE MEDICA S.R.L. (ProNatura), S.C. LEADER S.A. (Sere Pipera), S.C. ZAREA S.A., S.C. JIDVEI S.R.L., ASSOCIATION OF ROMANIAN SOMMELIERS 2011 and S.C. AMIA INTERNATIONAL IMPORT/ EXPORT S.R.L.
An internship was provided of 88 hours for 11 days, including Saturday, eight-hours/ day.

» The Company Medical Laboratories LLC - Pronatura (http://www.pro-natura.ro/)
The period of the internships for 28 students: 24.11. - 09.12.2014 (Group I) and 16.02. - 27.02.2015 (Group III).
Students who chose to make interrship to the Medical Laboratories LLC (Pronatura) had the chance to complete their knowledge in the field of dietary and herbal supplements with detoxifying effect on the body.
They also had the opportunity to benefit from the experience of a famous specialist in natural products and dietary supplements - Mr.Dr. Ionut Moraru. Thus, they participated in the following activities:
- analysis and selection of raw materials (ie, determining the quantity of water acidity and impurities in honey);
- completing the mandatory minimum quality standards of a product;
- manufacturing technology for food supplements;
- packaging, labeling, storage and delivery ;
- preparing Vinegar therapeutic named "Kambucha";
- dosage, encapsulation and packaging of dietary teas ;
- detection and removal of non-compliant products .
Interpreting the results resulted the following:
- The lowest mark given by company was 7.00 and the highest was 9.50;
- The lowest mark given by the tutor was 7.50 and the highest was 10.00;
- The overall average was 8.78;
- No trainee hasn't been evaluated in scoring range 1-4;
- The company evaluated 13 students (46.43 %) in the range of 5-8 and 15 students in the range of 9-10 (53.57 %);
- The organizer (Bioterra University of Bucharest) evaluated seven students (25.00 %) in the range of 5-8 and 21 students scoring 9-10 (75.00 %);
- The overall evaluation of the results showed that 14 students (50.00 %) achieved a final grade of 9-10;
- The company rating was close most of the final grade (Figure 1);



By authors calculations

Figure 1 - The assessment results of the students who have completed their practical training at Medical Laboratories LLC - Pronatura

- Although there is a significant difference between the grades of company and the grades of organizer, the obtained overall averages were close: from 8.57 to 8.99 (± 0.42).

» The Company JIDVEI LLC (http://www.jidvei.ro/)

The period of the internships: 05.01. – 16.01.2015 (Group II) and 17.04. – 30.04.2015 (Group VII).

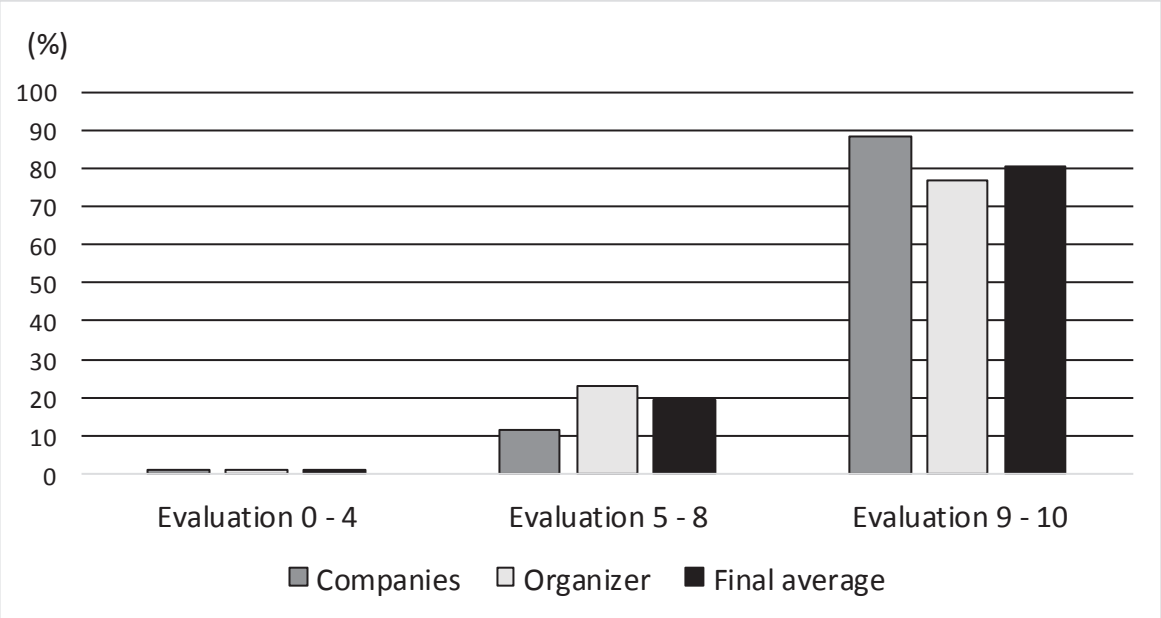
No. of students: 26

Students who decided to make internships within JIDVEI LLC had the chance to test their practical skills under real production conditions and to improve their knowledge in oenology, viticulture and sommelier activity. Thus, the students participated within the following activities:

- comparative tasting of still wines in order to identify possible gaps quality;
- comparative tasting of champagne and testing their organoleptic qualities depending on the used production method;
- tasting alcohol obtained by distillation;
- filling a tasting paper;
- physical - Mechanical determinations depending on the grapes varieties;
- lab. measurements to highlight the main components of wine that directly affects its quality (sugars, alcohol, acidity etc.);
- the combination of different foods and drinks (such as; to prepare a Menu and to present a product) ;
- what does it mean the profession of sommelier and what kind of qualities must have a future employee ;
- the identification of grape varieties cultivated in Romania.

We noticed the following situations by analyzing the students' results:

- The lowest mark given by the company was 8.00 and the highest was 10.00;
- The lowest mark given by Bioterra Univ was 8.00 and the highest was 10.00;
- The overall average was 9.14;



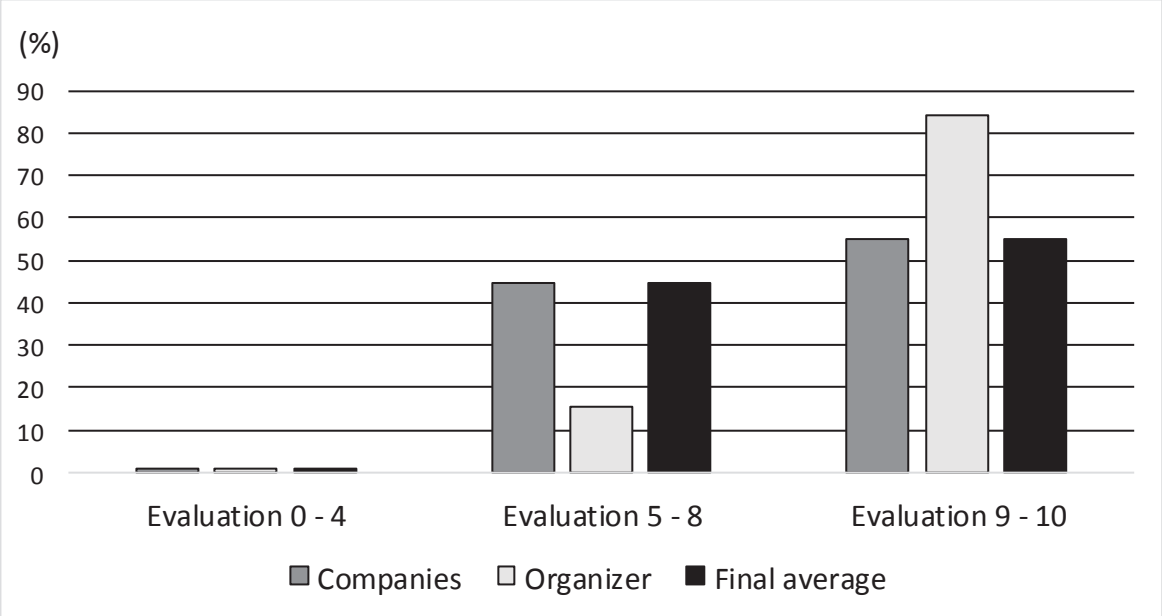
By authors calculations

Figure 2 - The assessment results of the students who have completed their practical training within JIDVEI LLC

- No trainee has been evaluated in the scoring range of 1-4;
- The company evaluated three students (11.54 %) in the scoring range of 5-8 and 23 students and in the scoring range of 9-10 (88.46 %);
- The organizer assessed six students in the scoring range of 5-8 (23.08 %) 20 students scoring 9-10 (76.92 %);
- The overall evaluation of the results of the group provided that 21 students (80.77 %) achieved a final grade of 9-10;
- All the grading intervals realized by organizer were close to the real final average (Figure 2);
- Although there is a difference between the grades of company and the grades of the organizer, the overall averages were very close: from 9.10 to 9.17 (± 0.07).

» The Company LEADER S.A. – GreenHouses Pipera

No. of students: 58.
The period of the internships: 09.03. – 20.03.2015 (Group IV), 23.03. – 03.04.2015 (Group V), 22.06. – 03.07.2015 (Group IX) and 22.06. – 03.07.2015 (Group X). Students who decided to make internship to S.C. LEADER S.A. (Pipera GreenHouses) had the chance to improve their knowledge in agricultural biotechnology. Thus, under the direction of the company employees and of the tutors, the students participated in the following activities:
- Completing the mandatory minimum quality standards that must meet a seed lot;
- Seed reception, packaging and labeling;
- Preparing orders for delivery;
- Disinfection of the protected spaces;
- Checking the quality of seedlings and the reception of goods;



By authors calculations

Figure 3 - The assessment results of the students who have completed their practical training within S.C. Leader S.A. Pipera GreenHouses

- Detection and removal of non-compliant seedlings;
- Planting seedlings on inert crop substrates;
- Trellising the grafted young tomato seedlings (import from Greece);
- Drippers moving for mix fertilizers distribution on the substrate;
- Harvesting, sorting and sizing tomatoes;
- Tomatoes transportation in deposit and the forms for inventory accounting;
- Preparing the forms for the goods delivery;
- Trellising the tomato plants;
- Defoliation of the plants old leaves;
- Chiseling the plants inflorescence;
- Performing the season phytosanitary treatments;
- Correlating the factors: light - temperature - humidity.

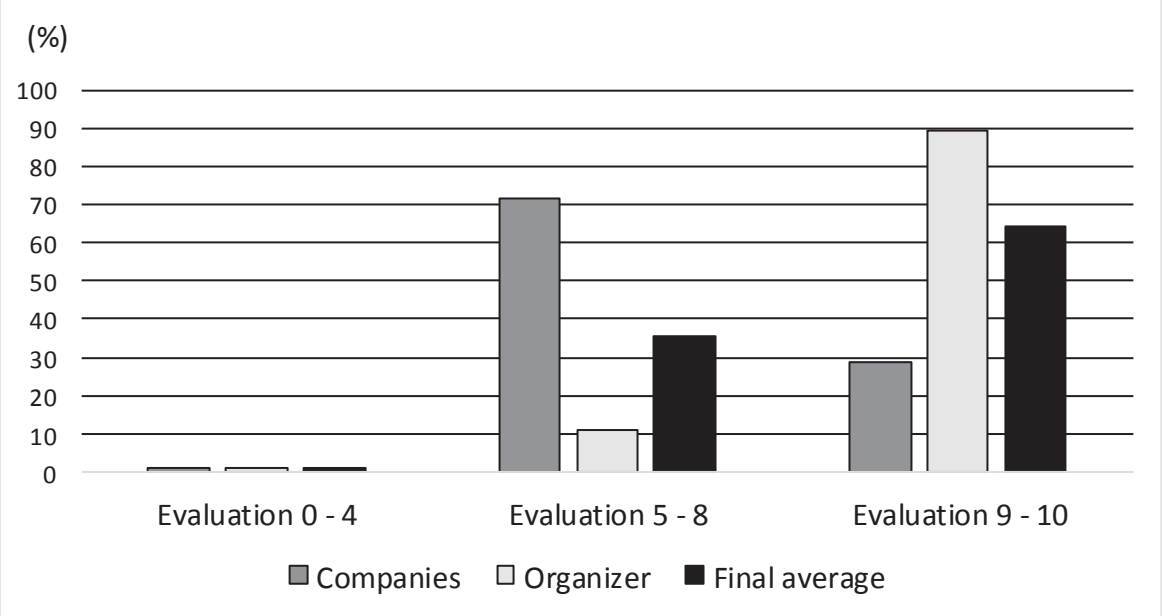
In interpreting the results it resulted the following:

- The lowest mark given by the company was 7.00 and the highest was 10.00;
- The lowest mark given by the organizer was 7.50 and the highest was 10.00;
- The overall average was 8.96;
- No trainee has been evaluated in scoring range of 1-4;
- The company evaluated 26 students (44.83 %) in the scoring range of 5-8 and 32 students in the scoring range of 9-10 (55.17 %);
- Organizer evaluated nine students (15.52 %) in the scoring range of 5-8 and 49 students in the scoring range of 9-10 (84.48 %);
- The overall evaluation of the group results provided that 32 individuals (55.17 %) achieved a final grade 9-10;
- For all intervals grading the company was close to the final average (Figure 3);
- Although there is a significant difference between the grades of company and the grades of organizer, the overall averages obtained are quite close: 8.68 – 9.23 (± 0.55).

» The company ZAREA S.A. (http://www.zarea.ro/)

No. of students: 28.
The period of the internships: 30.03. – 10.04.2015 (Group VI) and 04.05. – 15.05.2015 (Group VIII).
Students who decided to make internships within Zarea S.A., attened the following activities:
- The use of modern marketing methods for promoting and selling;
- Knowledge of manufacturing technology of champagne by fermentation in the bottle;
- Knowledge of manufacturing technology of macerated liqueurs of fruits and herbs (strawberries, raisins, raspberries, blackberries, blueberries, coriander, rose hips chamomile etc.);
- Production of alcoholic spirits by distillation;
- Comparative tasting of sparkling wines (Champagne, sparkling pearls and sparkling) in order to identify possible gaps quality;
- Organoleptic testing of some alcoholic beverages depending on the production method used;
- Filling a tasting paper;
- Lab measurements to highlight the main components of the beverages components that directly affects their quality (sugars, alcohol, acidity).

In interpreting the results, we noticed the following:
- The lowest mark given by the company was of 8.00 and the highest was of 10.00;
- The lowest mark given by the organizer was 8.00 and the highest was 10.00;
- Overall average was 8.95;
- No trainee has been evaluated in scoring range of 1-4;
- The company evaluated 20 students (71.43%) in the scoring range of 5-8 and 8 students in the scoring range of 9-10 (28.57%);



By authors calculations

Figure 4 - The assessment results of the students who have completed their practical training within ZAREA S.A.

- Organizer evaluated three students (10.71%) in the scoring range of 5-8 and 25 students in the scoring range of 9-10 (89.29%);
- The overall evaluation of the results of the group provided that 18 students (64.29%) achieved a final grade of 9-10;
- Neither the company nor the organizer were not close to the final average, between the two entities there were significant gaps in scoring (Figure 4);
- The significant difference between the grades of the company and grades of organizer is also reflected in the averages obtained: 8.53 to 9.37 (± 0.84).

Results and discussions

According to the "Practical Guide" and to the activities set to run under the "Best future labor market". Project, the internship ended with assessing student achievement and award notes / ratings . They were awarded grades from 1 to 10, where 1 is very little involved and 10 represents very involved in the practice.

A qualification was awarded by the company and the other qualification was awarded by the tutors appointed by the organizer (BIOTERRA University); between the two marks can't exist a difference of more than 2 points.

The average of these ratings represented the final grade of the practitioner student. The marks obtained by students were determined by the average of the group practice using the arithmetic average (Table 01).

Table 1:
The evaluation results of students in the study

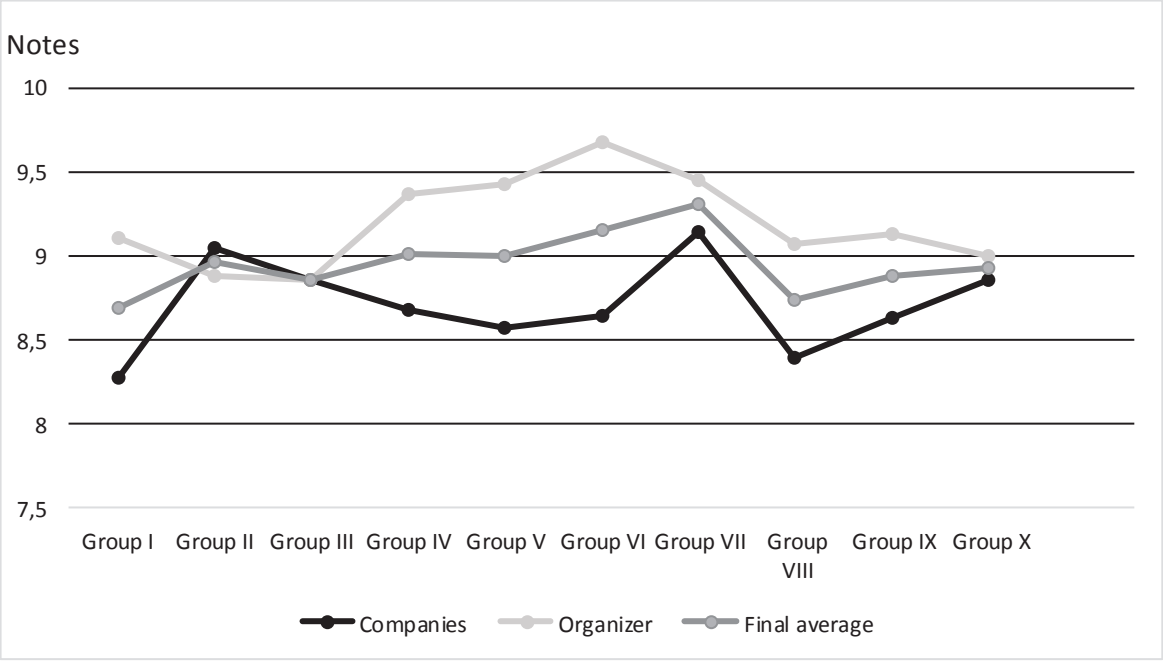
No.	Group	Students number	The group average		
			Grades given by the companies	Grades given by the organizer	Final average
1	I	14	8,28	9,11	8,69
2	II	13	9,05	8,88	8,97
3	III	14	8,86	8,86	8,86
4	IV	15	8,68	9,37	9,02
5	V	14	8,57	9,43	9,00
6	VI	14	8,65	9,68	9,16
7	VII	13	9,15	9,46	9,31
8	VIII	14	8,40	9,07	8,74
9	IX	15	8,63	9,13	8,88
10	X	14	8,86	9,00	8,93
The amount of the obtained marks			**87,13**	**91,99**	**89,56**
The average mark			**8,71**	**9,20**	**8,96**

By authors calculations

Conclusions

The obtained data were pooled and interpreted using the S.W.O.T. comparative method principles (Strengths, Weaknesses, Opportunities and Threats), the opportunities and threats representing the students' adaptation and integration into the team and their performances under real production conditions (Figure 5).

- The best results were recorded in Group VII (average 9.15), the company JIDVEI LLC was less demanding. Both, the organizer and the company appreciated the of the 13 students performance in the scoring range of 9-10;
- For the VII group there isn't a significant difference between the grades awarded by the companies and the marks given by the organizer. For this reason, the internship can be considered a success, the students gained theoretical and practical valorous information.



By authors calculations

» Strenghts

The interpretation of the results provided the following:
- No trainee has been evaluated in the scoring range of 1.00 to 4.99;
- The lowest mark given by the company was 7.00 and the highest was 10.00;
- The lowest mark given by the organizer was 7.00 and the highest was 10.00;
- The overall average was 8.96 for the practice groups;

» Weaknesses

The interpretation of the results provided the following:
- The worst results were recorded in Group I (average 8.28), the company Medical Laboratories LLC (Pronatura) being from this point of view the most discerning;
- A significant gap between the grades of company and the marks given by the organizer is due to the fact that the students even have

accumulated enough information, they failed to achieve the practical performance required by the company. Thus, the tutors have found that students less adapted to hard work of 8 hours in the production flow, and were unable to focus enough to achieve practical performance which led to lower grades given by the company.

» Opportunities

- To understand the identified weaknesses and to increase professional performance, we recommend that in the future the students working program must increase progressively from four hours in the early days of practice to eight hours lately;
- To eliminate the significant differences between the grades of company and the marks given by the organizer, we recommend that in the future at the end of each day of practice to be done a brief review of the gained theoretical and practical knowledge.

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