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Welcome Note

Since its founding, the SLFI has worked to develop Lebanese food products with high quality and accessibility by widening the horizons of our industry, and keeping the goal of penetrating new markets in mind. We will strive to keep working cooperatively, and professionally for the benefit of our industry, and ultimately for the development of Lebanon.

We invite all Agro-Food industrialists to join the syndicate, and current members to renew their memberships. The services that the syndicate provides are always improving; the latest of which are our new website and the newsletter you are now reading. The syndicate has also been participating intensively in regional and international Agro-Food exhibitions, as well as organizing training programs and seminars, and following up with governmental and non-governmental organizations.

As Lebanese, we always remain optimistic and we are known to adapt well to changing conditions. We hope that this optimism and adaptation becomes a collective act so that Lebanese Industry as a whole can grow and prosper.

Georges Nasraoui
President of the Syndicate



Success Story

LBLI, A Project that has Achieved its Goals

Three years of effort and determination have culminated in success for the Lebanese Business Linkage Initiative which was funded by the US Agency for International Development (USAID). Two meetings were held in Zahle and Dbayeh to bring the initiative to a close.

In Zahle, director of USAID Jim Barnhart expressed pride in the work accomplished with Lebanese farmers and the chamber of commerce saying: "Together we have improved the production chain of agriculture and tourism, and consequently improved the livelihoods of people".

LBLI's Deputy Project Manager Mr. Nasser Lama said that the success of the project can be attributed to a clear strategic plan for the various links in the productivity chain.

GlobalG.A.P certificates were distributed to seven farmers, as well as certificates of appreciation to different contributing stakeholders.

At the Beirut meeting Mr. Georges Nasraoui, President of SLFI praised the project for supporting the Agro-Food industry through opening up new markets and enhancing participation in international exhibitions, in addition to helping the syndicate to publish a quarterly newsletter and develop a new website.

The Director of USAID's Economic Development Office, Mr. Heath Cosgrove commented on the extraordinary results that the initiative achieved. Project Manager Mr. Criss Juliard then commented by saying: "LBLI has shared people's dreams and helped to realize them".

Mr. Nasser Lama also went over the accomplishments of the initiative such as helping Agro-Food industrialists create sales and marketing strategies and developing products that conform to international standards.

A round table including all stakeholders then took place to discuss the short and long term benefits of the initiative and to share experiences.

As the project comes to a close, it leaves behind a long lasting sustainable impact on all stakeholders.



USAID
FROM THE AMERICAN PEOPLE

LBLI

LEBANON BUSINESS LINKAGES INITIATIVE

e-newsletter: www.slfi.org.lb



IDAL Workshops New Programs for Agro-Food

There is no doubt that the Agro-food industry encompasses promising investment opportunities; it has created new job openings in the past few years, and now employs 20% of the total industrial labor. It is also one of the top ten exporting industries thanks to the world renowned reputation of Lebanese cuisine.

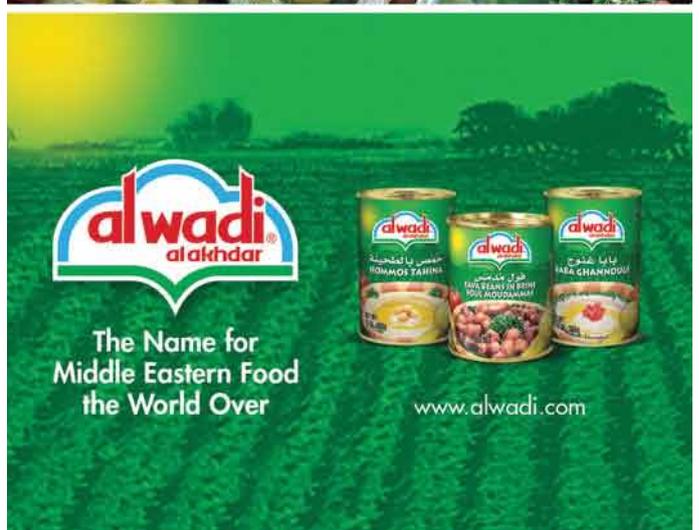
The Investment Development Authority of Lebanon (IDAL) held six workshops with the Syndicate of Lebanese Food Industrialists to discuss the best ways to support this sector and improve its competitive edge. Engaging with sector stakeholders falls within IDAL's mission of putting in place programs to actively promote the export of Lebanese products.

During the workshops, discussions revolved around the problems facing the sector, especially the increasing cost of production, the deficiency in governmental support, and the competition from neighboring countries.

The participants conducted analytical comparisons of the sector in other countries in order to benefit from those experiences and identify strengths and weaknesses.

The Chairman of IDAL, Engineer Nabil Itani, commented that the Agro-food sector is one of the top performers, with agro food exports registering double digit growth figures in 2010, and a cumulative growth rate of 7% from 2007 to 2010.

"The exports of agro food products have been increasing over the last few years despite a general slowdown in overall industrial sector exports. The sector enjoys vast potential in accessing new markets given its competitive advantages, such as the ability to tap from a diverse range of agricultural products, ease of access to international markets, and an increasing local demand for agro food products". He added that "the ultimate goal of these workshops is to develop a support program for promoting the agro food sector. Today, various programs are already in place to provide the sector with the optimal infrastructure to become competitive locally and internationally."



Imports and Exports of Agro-Food Industry: Facts and Figures

The Agro-food industry is one of the most important of Lebanese industries; it draws top industrial capital, and is the biggest employer of industrial labor. Agro-food industries take the lead with 18.2% of total industrial institutions in the country, 24.9% of labor, 25.7% of production and 26.9% of added value. It is estimated that the volume of production in Lebanese Agro-food industries is more than 1.7 billion USD.

Exports and Imports in the Agro-Food Industry

In Lebanon, the increase of import value happens at the expense of that of exports for many reasons. The actual value of world market prices has increased in parallel with a decline of Lebanese exports; this may be due to a lack of proper development for Lebanese products as well as the political and security conflicts that the country has witnessed.

The table below shows the progression of trade for the Agro-food industry from the year 2000 to September of 2011:

	Percentage of Total Imports	Agro-Food Imports (Million USD)	Percentage of Total Exports	Agro-Food Exports (Million USD)
2000	7.5	466.6	11.5	82.0
2001	7.5	547.0	12.3	109.1
2002	8.1	519.3	10.5	109.7
2003	7.4	529.2	10.4	158.7
2004	6.4	601.3	9.4	163.1
2005	6.6	613.1	10.9	205.2
2006	6.7	627.8	8.7	199.3
2007	7.4	875.7	9.1	255.5
2008	6.2	1001.3	8.6	300.5
2009	6.7	1088.3	8.7	302.5
2010	7.1	1270.1	8.2	346.9
2011*	7.5	1077.1	8.9	287.9

*September 2011



It is estimated that the gap in Agro-food industries was about 923.1 million USD in 2010 in comparison with 620.2 million USD in 2007. In the first nine months of 2011 it was estimated at about 789.2 million USD.

From 2007 to 2010 the value of Agro-food imports in dollars rose by 45% while the weight of imports for the same period rose by only 16%; the weight value of these imports averaged 1,240 USD/ton in 2010 in comparison with 990 USD/ton in 2007. In 2008 and the first nine months of 2011, the two years that saw noticeable increases in food prices, the average weight value of Agro-food imports was at 1,240 USD/ton, and 1,450 USD/ton consecutively.

As for Agro-food industry exports, the value rose by 36% in 2010 in comparison to 2007, while the weight value rose by 15%; consequently the average weight value of these exports reached 1,530 USD/ton in 2010 in comparison with 1,290 USD/ton in 2007. The average weight value of these exports had reached 1,280 USD/ton by September of 2011.

	2007		2008		2009		2010		2011	
	Imports	Exports								
Price per Ton in USD (Food Products)	990	1,290	1,240	1,580	1,170	1,570	1,240	1,530	1,450	1,280
Price per Ton in USD (All Products)	1,010	840	1,290	990	1,110	1,180	1,200	1,370	1,390	1,520

The Lebanese Agro-food industry is moving forward steadily. Food Industrialists should be encouraged to take action and widen their horizons by expanding product lines, using existing resources to their full capacity, and relying on modern technological advances to improve the overall quality of production and to ensure high standards of hygiene and sanitation.



Food Irradiation: a Promising Food Safety Treatment

Karen Menassa, Food Safety Specialist

Food safety is a main concern for food industries. Traditional processes used to destroy microorganisms are based on heat treatment such as pasteurization and UHT. Food irradiation is a new type of food safety and preservation technology that eliminates insects, parasites, fungi, spoilage bacteria and disease-causing microorganisms like E.coli 0157:H7, Campylobacter, and Salmonella.

Irradiation involves radiation energy instead of heat and is considered safe, efficient and approved worldwide after decades of research held by joint committees of international institution that includes the World Health Organization (WHO), the United Nations Food and Agriculture Organization (FAO) among others.

Irradiation has many advantages:

- The nutritional value and organoleptic properties of food are not affected.
- The food is not affected radioactively since it never contacts a radioactive substance, and the ionizing radiation used is not strong enough to disintegrate the nucleus of food molecule atoms.
- Chemical changes are not harmful and imperceptible.

This method is approved and mainly used for dry goods such as spices, herbs and seeds among many others.

It has been spreading around the world, but still not commonly used because of its high cost. However, this technology can be a pass key for most Lebanese food industries exports since it combines long term preservation, quality, and safety.



Natural Food Additives for Sustainability

Karen Menassa, Food Safety Specialist

Colorful, appetizing, great tasting, with an attractive texture and longer shelf-life; these are the specifications food industries look to have in their products. That's where additives come into play: they keep food attractive. But in meeting the consumer's preferences are they compromising consumer safety?

Nowadays there is a tendency towards natural and organic food consumption. Food industrialists have a responsibility towards the consumer, and should take note of this trend and improve on their sustainable production by using natural additives that will keep food safe and free of chemical contaminants.

Some additives are classified dangerous by the World Health Organization (WHO) because they include toxins such as Potassium nitrate (E249), Potassium Bromate, Sodium Nitrate/Nitrite, and Red dye #3 (E124).

Other additives are only allowed to be used in certain concentrations such as caramel color (0-100 mg/kg), Ammonium salts of phosphatic acid (0-30 mg/kg).

Natural additives are a safe substitute, since they are natural derivatives and easy to find. Examples of those are beet juice, red Cabbage, and some vitamins.





Energy Saving and Food Industry

Nader Hajj Shehadeh, Energy Engineer

The food and beverages industry accounts for 18% of industrial establishments in Lebanon, and according to the ministry of industry's statistical report for 2007, they consume an average of 92,600 USD per year for electricity production.

Based on energy audits conducted in the past decade, a statistical model was developed by the Lebanese Center for Energy Conservation (LCEC) and it showed that thermal energy costs around 45% of a facility's total energy bill. Motors and pumps make up to 37% of the total annual electrical consumption, refrigeration processes and cooling make up to 24% and 23% respectively, and lighting and auxiliary equipment make up 11% and 5% respectively.

Efficient use of energy, and consumption waste reduction could save up to 50% of the facility's bill. One of the most effective energy efficiency measures is the implementation of heat recovery for cogeneration. This enables a facility to produce hot water or electrical energy from wasted heat, saving an average of 11% of the total electric bill with a payback period averaging at 6.4 years. Another common measure is power factor correction which includes applying treatment to motors and pumps saving an average of 1.2% annually, with an average payback period of 2 years.

The proper assessment of energy efficiency potential is done through a comprehensive energy audit. The output of an energy audit is a detailed report describing the energy consumption profile at the facility, and presenting the possible solutions.

The table below shows the major possible energy efficiency measures with the average energy consumption reduction and the average simple payback period.

	Saving on Energy Consumption	Simple Payback Period
Motor Treatment	1.15%	2.06
Variable Frequency Drive	0.28%	5.86
Refr. Compressor Treatment	0.64%	0.81
Lighting Retrofit	4.51%	1.97
Daylight Controller	0.26%	0.62
Heat Recovery	10.74%	6.40
HFO Boiler	16.57%	0.31
Integrated Burner Control	3.17%	0.39
Exhaust Gas Boiler	8.94%	0.69
Preheating	1.81%	1.92
Solar Water Heating	0.49%	4.02
Absorption Chiller	2.15%	10.75
Boiler Improvement	0.13%	0.14
Insulation of Pipes	0.02%	0.14
Harmonic Treatment	0.10%	1.97
Building Insulation	3.64%	2.00
Temperature Regulation	0.16%	0.64

With the support of the Central Bank of Lebanon, facilities wishing to implement energy efficiency measures can benefit from long term interest-free loans with a payment period of 10 years and a grace period of 4 years through (NEEREA) the National Energy Efficiency and Renewable Energy Action, which targets renewable energy and energy efficiency implementations in all sectors and all types of activities.



Agro-Food Graduates Share...

Students of the Agro-Food Industries Vocational School who graduated six months ago with a Technical Baccaulaureate and are continuing on at the School for a higher degree, shared their thoughts about their learning journey.



Most students said that they had chosen this field because of its importance, practicality, and the employment opportunities it provided. They also said that the proximity of the school to food processing factories was very beneficial.

Students found quality systems tools and laboratory sessions most valuable to their studies, and said that they would like to learn more about production management, water testing, and quality manufacturing tools. They also stressed the importance of the practical training that helped them apply the theories they had learned.



Lebanese Honey - From the Hive to the World

Doris Saad, Journalist

Humans began to cultivate bees for their honey almost 4000 years ago. Ever since honey has been known for its nutritional and medicinal value as it has since been proven to contain nutrients that help the body resist infection and heal itself.

Lebanon produces a variety of quality honey because of its diverse geography, and is rated among the best in the world based on the accreditation of German and Belgian honey experts.

Honey Production in Lebanon

The Ministry of Agriculture estimates the existence of 5,250 beekeepers, and 175 bee colonies.

Mr. Ramzi Moghrabi, head of the bee department in the Ministry of Agriculture stated that this sector is a source of income for many people. He says that among the difficulties faced by the sector are the importing of queen bees in a random manner threatening lineage and production, the use of pesticides on flowering trees, and the lack of proper equipment in honey testing laboratories. Added to that, there is competition from imported honey and not enough consumer awareness about the quality of honey.

Mr. Hussein Kadamani the managing director of the “Jabal El Sheikh” company asserts that the honey sector in Lebanon is very promising despite some difficulties, and that Lebanon now exports honey to the United States and the Gulf States. He added that the Association of Lebanese Beekeepers is working with the Ministry of Economy on a negotiation strategy to include Lebanon as a honey producing country in the Euro-Mediterranean treaty.



Supporting the Sector

The Ministry of Agriculture for its part is striving to regulate the beekeeping sector, and has called on all beekeepers to fill out surveys, and has assigned codes for different hives. The Bee department in the ministry is working in coordination with the private sector and NGOs to provide beekeepers with equipment and support. Coordination is also under way with the Ministry of the Economy to monitor imported and locally produced honey to ensure quality and credibility.

Beekeeping is an ancient sector that has been handed down through generations, and is well worth preserving for its cultural as well as its economical worth for Lebanese industry.



Decree to Improve the Quality of Olive Oil

By order of decree number 6585, a memorandum of understanding has been signed between the Lebanese government, represented by the Ministry of Agriculture, and the Italian government, represented by the Italian Embassy. This memorandum focuses on the national project to improve the quality of olive oil and to combat the spread of Phytoplasma; it will include a grant of 1,775,400 Euro. The project is aimed at developing the administrative capacities of the Ministry of Agriculture in relation to improving the quality and quantity of olive oil production, and to establish a national laboratory for quality assurance purposes, as well as providing the ministry with the proper equipment to monitor soil, and develop research on the pests that transmit Phytoplasma.

Decree 65/1 Replaced

The Lebanese Ministers of Agriculture and Industry issued the decree number 950/1 requiring the registration of all food factories and the implementation of technical control over them. This decree replaces the decree 65/1 issued by the Ministry of Agriculture on January 15, 2011.

Decree Regulating Meat Transport

The Lebanese Ministry of Agriculture has issued decree number 951/1 which outlines health regulations for vehicles used to transport cooled and frozen meats. The decree states that the vehicles should be registered with the Ministry of Agriculture provided that they meet the criteria for cleanliness and the proper disinfection of the vehicles. Additionally all persons transporting meat should have a health certificate ensuring that they are free of any infectious and communicable diseases, and that they should wear proper hygienic attire.



ANUGA 2011 October 8-12, 2011

14 Lebanese Agro-Food Industrialists participated in ANUGA Fair 2011 in Cologne Germany.

The fair included 6500 exhibitors from 95 countries and attracted up to 150000 visitors. An Increase of the rate of exports by 20 to 30 % was noted after participating in ANUGA Fair 2010. Contracts were signed by Lebanese participants with different Western European companies.

“Lebanese Exports, Challenges and Opportunities” Workshop - On September 21, 2011, SLFI organized a workshop entitled: Lebanese Exports Challenges and Opportunities. Discussed during the workshop were new Export Laws to the USA as well as the Export Web Portal.

Regional Forum of Agro-food Industries - From November 15-18, a delegation from SLFI participated in the Regional Forum of Agro-food Industries organized by FAO in coordination with UNIDO and the Lebanese Ministry of Agriculture.

Best Practices in labeling Management - On November 27 & 28, a delegation from SLFI participated in a workshop organized by Nielsen on the Best Practices in Labeling Management.

Gulfood 2012 February 19-22, 2012 - A delegation of 33 Agro-food industrialists will participate in the Gulfood Exhibit 2012. This exhibit hosts upwards of 3800 companies in 81 pavilions attracting over 55000 visitors from 152 different countries.

SAVE THE DATE



Magnetic Tongue Able to Detect Flavors

A recent study has revealed the invention of a magnetic tongue that uses Nuclear Magnetic Resonance (NMR) technology, which may be able to detect the taste of food. This invention could help companies develop new food products quicker and at a lower cost.

Researchers from Universities in Denmark and Italy used NMR fingerprints recorded for 18 samples of canned tomatoes to correlate them to sensory descriptors for specific tastes, density and redness.

EU Extends Ban on Certain Types of Egyptian Seeds

The European Union extended the ban imposed in July on certain types of grains and beans imported from Egypt, following the outbreak of the deadly E-coli in Europe.

The ban was supposed to be lifted on October 31, but the European Commission extended it until March 31, 2012 due to the ineffective measures the Egyptian authorities have taken to guarantee the safety of exported grains and plants.

Oyster Mushroom Harbors New Flavors

According to a study published in the “International Journal of Food Science and Technology”, fermented Oyster mushrooms have been found to be a natural source of flavors. A team of researchers from China and the United States prepared 15 sterilized samples then added amino acids and sugars to the center of the mushrooms and exposed them to heat, which led to the emergence of six basic flavors: Meat, sugar, mold, dust, sulfur, chili, and burnt sugar.

Edible Food Wrapping Film

Researchers at a University in the United States have developed a new edible nylon film that would potentially enhance the shelf life of foods. This food protective film combines two ingredients: Chitosan, a type of fiber extracted from shellfish, and Lysozyme, an egg white protein. The wrapping comes in a thin film and fluid that foods can be dipped into. Vitamins and minerals can be added to raise the nutritional value of the food it wraps.



In our next issue

- The Sanitary Number – Progress & Update
- Lebanese “Mouneh”... Season to Season
- Green Steps for Agro-Food Industry
- Syndicate’s Services: Evaluation Survey Outcome