

Invest in AGRO-FOOD in Emilia-Romagna

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The **agro-food cluster** in Emilia-Romagna is known as a leader on an international level not only for combining tradition and innovation but also for achieving high standards of food quality and safety.

Companies in our region are competitive both in vegetable and animal production. They are skilled and efficient at processing and preserving these products; as well as in cross sectors such as agricultural mechanics and food packaging.



LEADING FACTORS

- Internationally famous high quality brands
- Export figures of 6.6 billion Euros in 2014 with an increase of 25% with respect to the 2008 values.
- Laboratories and regional research centres which are organized in a thematic Agro-food Platform
- The Regional Rural Development programme supports agriculture and provided finance of 1.2 billion Euros in the period from 2007-2014
- The EFSA, the European Food Safety Authority, has its headquarters in Parma

Invest in high quality products

In Emilia-Romagna there are **41** PDO (Protected Designation of Origin) and PGI (Protected Geographical Indication) **certified products**, of which the most well known names internationally are Parmigiano Reggiano – Parmesan cheese, Prosciutto di Parma – Parma ham and Aceto balsamico di Modena – Balsamic vinegar from Modena. The **research laboratories** in the Regional High Technology Network are organized in a **thematic platform** (an established group of research laboratories specializing in agro-food issues) and work on the **quality and safety** of raw materials, processing, machinery, equipment, finished products, **health issues** and on the **enhancement and development of traditional products**.

The agro-food cluster on an international level

The cluster has a **high level of exports**, 6.6 billion Euros in 2014, mainly to the European market. Among the **leading sectors** in foreign markets the ones to mention are agricultural machinery as well as vegetable and animal production with outstanding meat, fresh fruit and processed food products (in particular cereals, dairy, fruit and vegetables). There are **9 international trade fairs** that cover this sector and are connected either directly or indirectly with the cluster.

Invest in local specialization

The agro-food cluster as a whole is quite evenly spread all over the region. The highest concentrations of numbers employed are in the provinces of Bologna, Parma, Modena, Reggio Emilia and Forli-Cesena. Looking at the individual sectors in more detail there are actually specialized fields and items in all the provinces. Cooperatives also play an important role in the development of this cluster in our region.

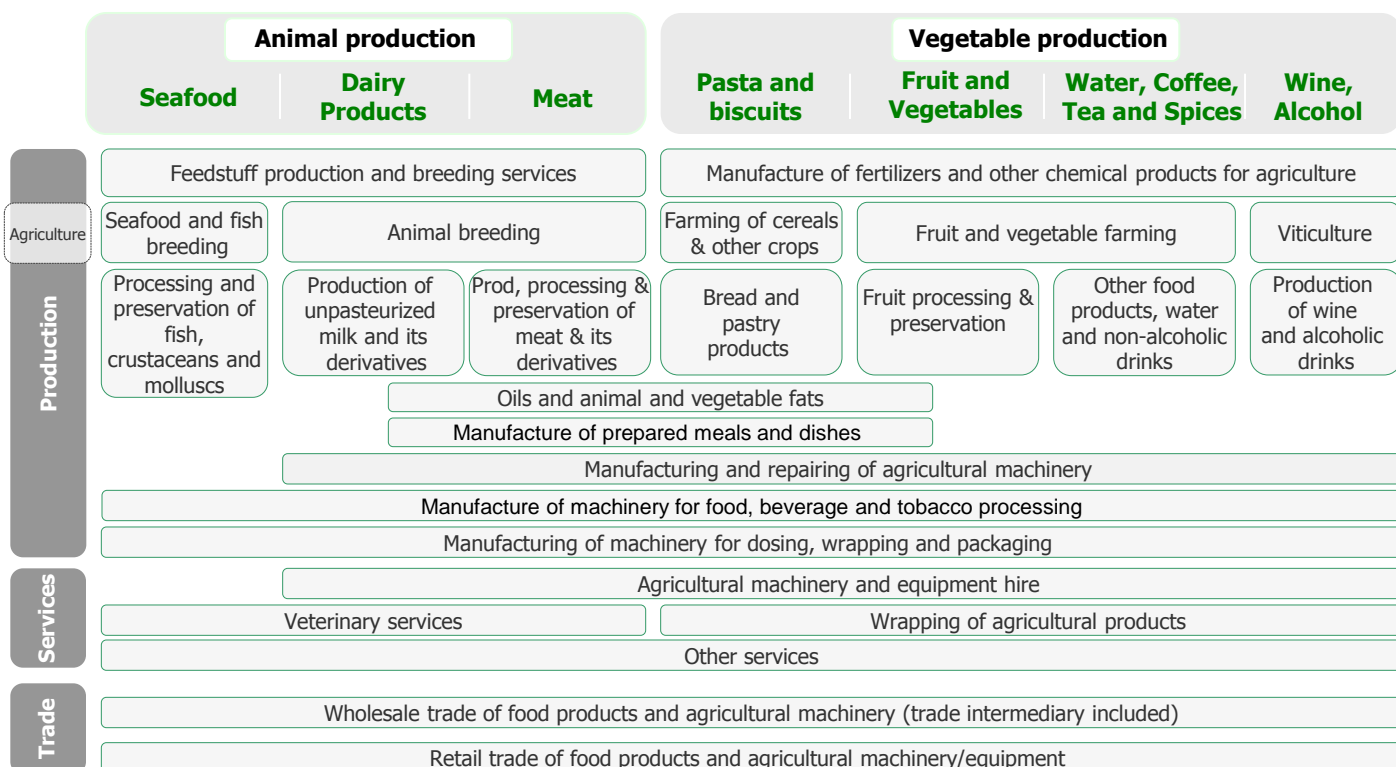
Among the **production of vegetables** the highest figures are of cereals, potatoes and vegetables (tomatoes in particular), pears, nectarines and wine. With **animal production**, cow milk stands out the most, followed by poultry, rabbits, pork and beef products and eggs. **The industry that specializes in the processing of products** plays a considerable role in agro-food but the cluster also involves other **important sectors** such as **agricultural machinery**, one of the region's best performing industries as well as **food packaging**. The **chilled food chain** is very efficient and well established in our region and contributes significantly in maintaining the freshness and high quality of products from our region.

SOME COMPANIES FROM THE REGION



The agro-food cluster: its structure and its sectors

The **agro-food cluster** is divided into two main areas, **animal and vegetable production** which have common **cross sectors**. Added to this are the **service** and **trade** sectors.



Companies and the number employed

Agro-food cluster – Local units and number employed: absolute values and quotas of the totals (Asia,2010).

Agro-food Cluster	Local Units	% Quota of local units in the entire cluster	Number employed	% Quota of number employed in the entire cluster	Average dimension of the Local Unit
Dairy products	410	1.5%	4,959	2.8%	12.1
Meat	927	3.4%	16,971	9.7%	18.3
Total animal production	1,337	4.9%	21,930	12.6%	16.4
Pasta and biscuits	3,160	11.7%	17,590	10.1%	5.6
Fruit and vegetables	165	0.6%	8,471	4.9%	51.3
Other products, water and non-alcoholic drinks	551	2.0%	6,090	3.5%	11.1
Total vegetable production	3,876	14.3%	32,151	18.4%	8.3
Other products (seafood, wine and oils)	255	0.9%	3,316	1.9%	13.0
Ready meals	106	0.4%	1,441	0.8%	13.6
Total mixed production	361	1.3%	4,757	2.7%	13.2
TOTAL FOOD INDUSTRY	5,574	20.6%	58,838	33.7%	10.6
Feedstuff production	110	0.4%	1,921	1.1%	17.5
Manure manufacture	49	0.2%	957	0.5%	19.5
Total accessory production	159	0.6%	2,878	1.6%	18.1
Manufacturing and repairing of agricultural machinery	877	3.2%	11,161	6.4%	12.7
Manufacturing of machinery for packaging in the food industry	1,336	4.9%	21,528	12.3%	16.1
Total agricultural machinery	2,213	8.2%	32,688	18.7%	14.8
Services (hire, packaging, veterinary, etc.)	2,127	7.9%	3,081	1.8%	1.4
Wholesale trade	7,975	29.5%	28,847	16.5%	3.6
Retail Trade	9,001	33.3%	48,201	27.6%	5.4
Total Trade	16,976	62.8%	77,048	44.1%	4.5
CLUSTER TOTAL	27,049	100.0%	174,533	100.0%	6.5

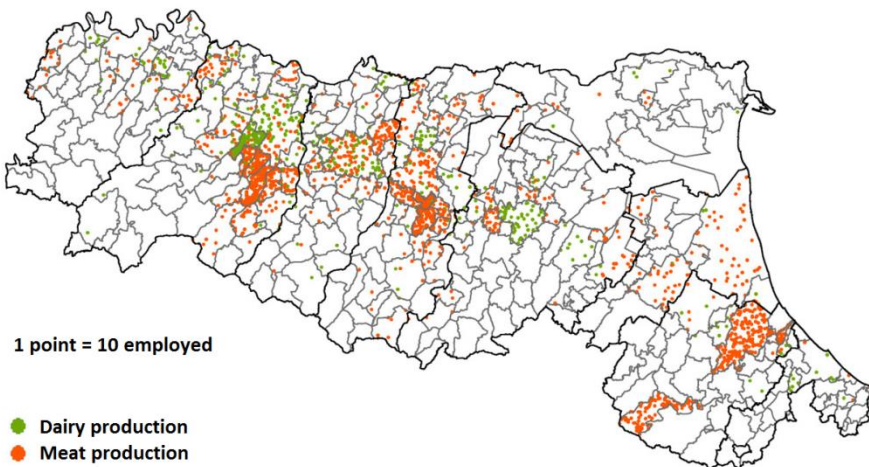


The regional agro-food cluster

Source: Asia Databank - 2010

The agro-food cluster is spread all over the region with high concentrations of particular divisions and sectors. "Wholesale and retail trade" is not shown in the maps below as it is a sector which is distributed in a fairly homogeneous way in all the provinces of the region.

Agro-food cluster Number employed in the Animal Production sectors



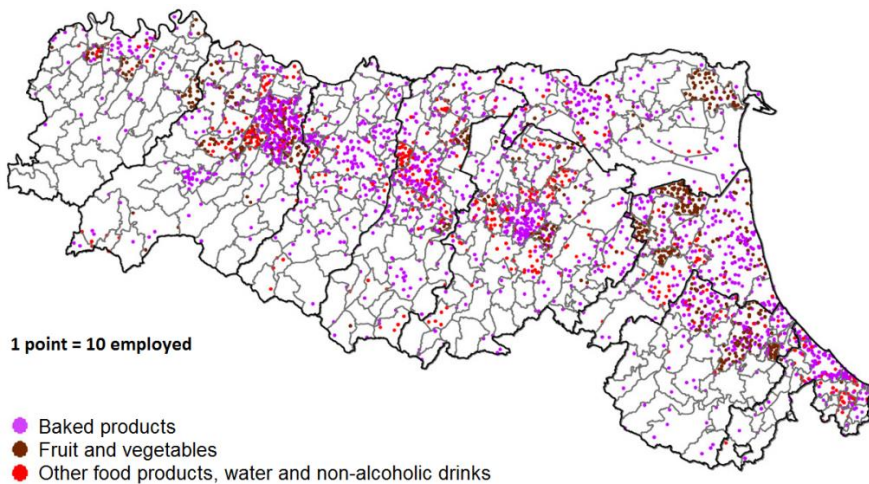
Areas with the highest concentration of numbers employed

Animal products

Dairy production – the Collecchio, Parma, Bologna and Reggio Emilia municipalities. Province of Modena is also relevant.

Meat production – the Forlì-Cesena and Parma provinces followed by Modena; the Cesena, Langhirano (PR), Santa Sofia (FC), Castelnuovo Rangone (MO), Felino (PR) and Reggio Emilia municipalities.

Agro-food cluster Number employed in the Vegetable Production sectors



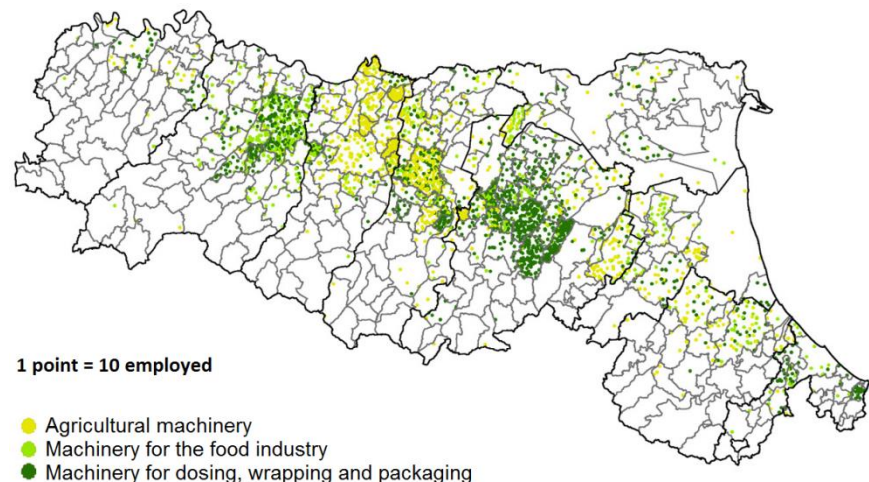
Vegetable products

Baked products – all the municipality capitals in the following order: Parma, Bologna, Ravenna, Modena, Ferrara, Rimini, Forlì, Reggio Emilia and Cesena.

Fruit and vegetables – the Alfonsine, Cesena, Codigoro (RA), Parma, Ravenna, Longiano (FC), San Lazzaro (BO) and Massa Lombarda (RA) municipalities.

Other products – Lower levels of concentrated numbers with higher figures in the Modena and Parma provinces .

Agro-food cluster Number employed in the Machinery sectors



Machinery sectors

Agricultural machinery - the provinces of Modena and Reggio Emilia (the Po Valley area).

Machinery for the food industry - mainly Parma, then Lugo, Cento, Carpi and Anzola.

Packaging machinery – the Bologna province (municipalities of Bologna, Ozzano, Pianoro and Anzola) followed by Parma and Modena.

The agro-food cluster on an international level

Exports

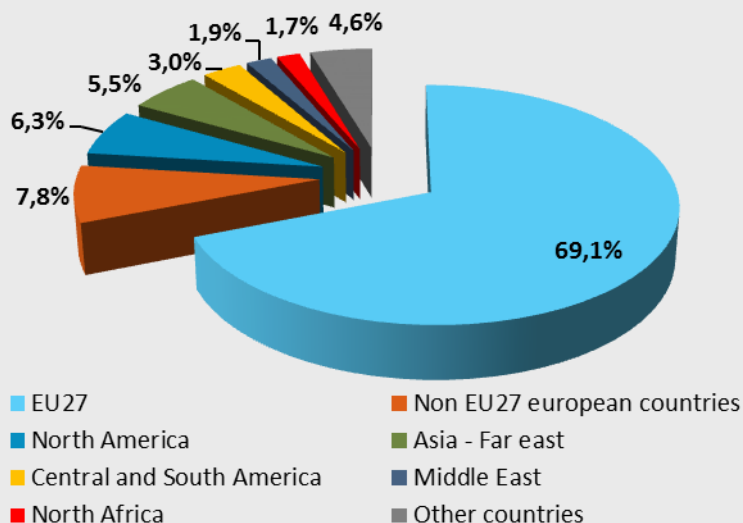
Source: Istat Coeweb Databank

In 2014 exports from the agro-food value-chain in our region amounted to around 6.6 billion Euros, 17.1% of the national total. The various agro-food sectors represent 12.5% of total exports from Emilia-Romagna.

Where we export to

Emilia-Romagna mainly exports to Europe which makes up over 69% of total exports from the cluster, followed by North America.

Export flows of the agro-food chain by destination (2012, Istat)



The top ten importing countries in 2012 and variations in % terms compared with 2000

Country	Export 2012 (euro)	Var.% (2012-2000)
Germany	1,174,716,830	66.3%
France	981,988,453	78.1%
UK	417,933,775	51.3%
USA	300,858,457	33.7%
Spain	237,116,827	19.2%
Austria	182,747,236	87.1%
Netherlands	172,318,959	64.0%
Greece	147,032,412	19.5%
Belgium	144,760,998	75.2%
Switzerland	138,814,250	48.4%
Worldwide	6,230,732,504	80.7%

Export sectors and trends

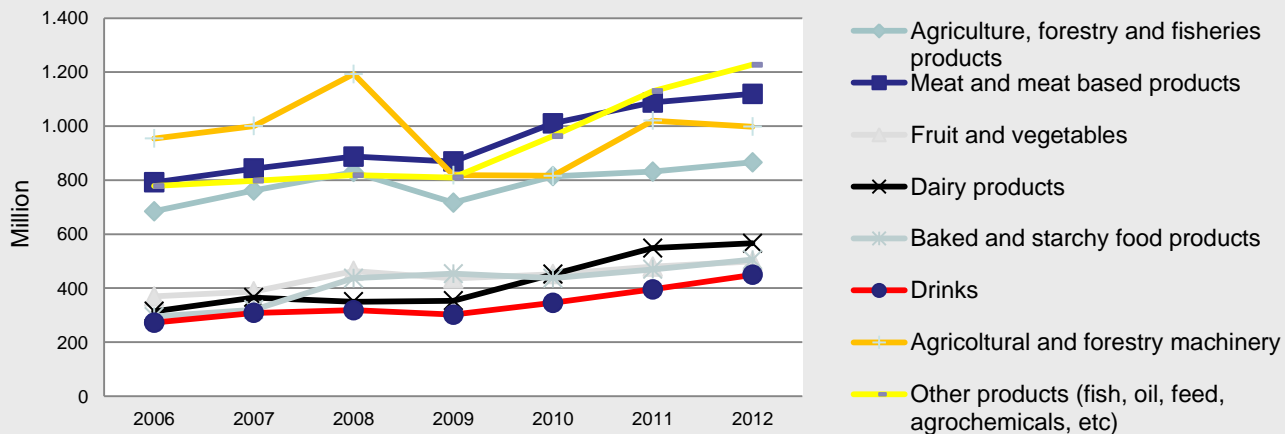
The Agro-food cluster export trends

2006 - 2008	18.8%
2008 - 2010	-0.1%
2010 - 2012	17.8%
2006 - 2012	39.7%

The agro-food value-chain as a whole maintained increasing export figures during the years 2008-2012 showing good resilience to the crisis, hence a natural anti-cyclical attitude. **Dairy products, Other products (fish, oil, feed, agrochemicals, etc.), Drinks and Meat and meat based products show the highest growth rates**, higher than the mean value of the overall value-chain (+17,6%)

More export-oriented sectors are in order: *Other products, Meat and meat based products, Agricultural and forestry machinery and Agriculture, forestry and fisheries products*. Together hold 67,6% of total export.

Graph – Export trends in the main sectors of the agro-food cluster (Mln of euro, Istat)





The agro-food cluster on an international level

International Trade Fairs

 CIBUS www.cibus.it CIBUS TEC www.cibustec.com	Cibus – International Food Fair held at the Parma Trade Fair site. Cibus Tec Food Pack – Exhibition of Technologies for Food Industries , held at the Parma Trade Fair site.
 EIMA INTERNATIONAL www.eima.it	International Showcase of Agricultural Machinery held at the Bologna Trade Fair site.
 MACFRUT www.macfrut.com	International Exhibition of plants, technologies and services for the production, conditioning, marketing and transport of fruit and vegetables , held in Rimini.
 SANA www.sana.it	SANA - International Exhibition of natural products : food, health and the environment, held at the Bologna Trade Fair site.
RHEX www.rhex.it	RHEX – Rimini Horeca Expo , held at the Rimini Trade Fair site, together with Sigep
 SIGEP www.sigep.it	SIGEP – International Exhibition of Artisan foods : Ice Cream, Pastry, Confectionery and Baked items. It is held at the Rimini Trade Fair site.
 R2B - Research To Business www.rtob.it	Participants include companies and research bodies, some of which are part of the agro-food cluster, in particular in the sectors that represent the development of new products and processes, the characterization and selection of raw materials, design and validation of machinery and equipment, food production and packaging, biotechnology, etc.
 GLUTEN FREE EXPO www.glutenfreeexpo.it	International Fair dedicated to gluten free product and diet, held at the Rimini Trade Fair site.

Top investors

Some important foreign investors in the agro-food industry in Emilia-Romagna.

Company	Investor	Country of Origin	Type of business
PIONEER HI-BRED ITALIA SEMENTI SRL	PIONEER HI-BRED INTERNATIONAL	United States	Processing of corn from seeds
NUNHEMS ITALY SRL	BAYER AG	Germany	Seeds
MECTRACK SRL	CATERPILLAR INC.	United States	Spare parts for tractors and agricultural machinery
NIRO-SOAVI SPA	GEA GROUP AG	Germany	High pressure homogenizers and pumps for the food industry
LOUIS DREYFUS ITALIA SPA	LOUIS DREYFUS & CIE SA	The Netherlands	Wholesale trade of cereals, grain, flour, oilseed and other products
AGCO ITALIA SPA	AGCO CORP.	United States	Wholesale trade of tractors and agricultural machinery
JOHN BEAN TECHNOLOGIES	JOHN BEAN TECHNOLOGIES	United States	Machineries for production and processing of agro-food products

Services available to agro-food businesses in Emilia-Romagna

Research and Innovation

High Technology Network – Agro-food Platform
ASTER - www.aster.it

CIRI AGROALIMENTARE - Interdepartmental Centre for Industrial research. University of Bologna - Forlì-Cesena Technopole www.agroalimentare.unibo.it

Two Operating Units: Areas covering processes, food, consumption and health; Bioanalysis, bioactivity, microbiology and valorisation of microorganisms for industrial purposes. Specializations in the use of microorganisms to improve and innovate products and the evaluation of the effects of technological processes on the quality and safety of food also regarding improvements in the shelf life of products.

C.I.M. University of Parma - Parma Technopole www.cim.unipr.it
Interdepartmental Centre for Measures - C.I.M. specializes in the development of new methods to determine the typicality and geographical origin of foods using Nuclear Magnetic Resonance and high resolution mass spectrometry.

CIPACK University of Parma - Parma Technopole www.cipack.it
Reference point for research on packaging for use in the food and pharmaceutical industries. The research fields covered: innovative materials, quality and hygiene, highly developed and advanced plants plus the environmental impact.

Laboratorio CRPA LAB Reggio Emilia Technopole www.crpa.it
Valorisation and characterisation of animal origin products in particular typical local ones and those with a protected designation of origin. Additionally, the characterisation of organic waste and by-products from agro-food businesses and the corresponding valorisation of energy (biogas) and materials (fertilisers).

SITEIA.PARMA University of Parma – Parma Technopole www.siteia-parma.it

Laboratory that focuses on industrial research and technological transfer, with expertise in supporting the development of new products and processes, characterisation and selection of raw materials, design and validation of machinery and plants for food production and packaging.

BIOGEST.SITEIA University of Modena and Reggio Emilia – Reggio Emilia Technopole www.biogest-siteia.unimore.it

Laboratory that works on the management and genetic improvement of biological resources concerning agro-food and industry as well as innovation in food Technology in particular to do with packaging systems.

Other institutes:

SSICA Experimental Station for the Food Preserving Industry www.ssica.it

CRIS - Interdepartmental Centre for Safety and Risk prevention <http://cris.unimore.it/>

CRPV LAB - Crop Production Research Centre www.crpv.it/
CSA Group - www.csaricerche.com

Invest in agro-food
in Emilia-Romagna

For further information:
www.investinemiliaromagna.eu
investinemiliaromagna@ervet.it

Universities – Specialized courses

Degree courses and masters in:

- Animal biotechnology
- Marketing and Economics of the agro-industrial system
- Animal production and wildlife management
- International horticultural science
- Agricultural/Food science and technology
- Safety and Quality in Animal Production
- Viticulture and enology
- Veterinary Medicine
- Planning and management of agro-territorial, forest and landscape
- Aquaculture and Fish Production Hygiene
- Master: Water-Culture and Fish Pathology
- Master: Specialist ultrasound techniques in small animal veterinary med.
- Master: Sustainable development, management of Environmental Sys.
- Master: Land and water conservation

At the University of Bologna www.agraria.unibo.it

- Agro-food technologies and industrial biotransformations

At the University of Ferrara www.unife.it

- Agro-food science and technology

- Master: Food innovation

At the University of Modena and Reggio Emilia www.unimore.it

- Food science and technology

- Gastronomy Studies

- Mechanical engineering for the food industry

At the University of Parma www.unipr.it

- Food science and technology

- Food marketing and business strategies

- Master: Smea – Agro-food management

- Master: VINTAGE - Viticulture and oenology

Cattolica University in Piacenza www.unicatt.it

Training institutes

•**IFOA** (Vocational Training and Educational Institute for Companies in the field) www.ifoai.it

•**DINAMICA** www.csa.it

•**IRECOOP** (Regional Cooperative Training Institute for Emilia - Romagna, based in Bologna) www.irecoop.it

•**CESCOT** (Trade Centre, Tourism and Services, Cesena - Fc) www.cescot-cesena.com

•**FORMA FUTURO** (Parma) www.formafuturo.it

•**IAL** (Innovation-Learning-Work) www.ialemliaromagna.it

•**ISCOM** - www.iscom-modena.it

•**ENFAP** - www.enfap.emr.it

•**FUTURA** - www.cfp-futura.it

•**For the full catalogue of Higher Education in the Emilia-Romagna region:** www.altaformazioneinrete.it (in Italian)

Agencies and Associations

EFSA – European Food Safety Authority (Pr)
www.efsa.europa.eu

The main national **associations of machinery manufacturers and suppliers in the agro-food cluster:**

•**FEDERUNACOMA** National Union of Agricultural Machinery
www.federunacoma.it ;

•**U.NI.MA.** National Union of Agricultural Mechanisation Companies www.unima.it ;

•**ENAMA** National Institute for Agricultural Mechanisation
www.enama.it ;

•**UNACMA** National Union of Distributors of Agricultural Machinery
www.unacma.it