

CULTURAL IDENTITY, TERRITORY AND AGRI-FOOD SUPPLY CHAINS. THE CASE OF SOME PRODUCTS OF THE MEDITERRANEAN DIET

Giovanna Galeota Lanza*

Abstract

Recognized "Intangible Cultural Heritage of Humanity" by UNESCO in 2010, the Mediterranean diet can not be reduced to a mere set of typical foods of the Mediterranean basin, it coincides with a common *modus vivendi* to the countries bordering on the same sea. An element of pure cultural identity that has become a healthy and sustainable diet model, indeed, one of the most sustainable food models both for the environment that for health.

Yet, even if we are talking about a real lifestyle, it's mostly food and raw materials (vegetables, fruits, cereals, olive oil) that, as such, can not escape the logic of the globalized market.

Through an analysis of the agricultural and food production and import-export flows, this paper proposes, in relation to the Italian case, to examine to what extent some products that traditionally compose the Mediterranean diet come from that region and, conversely, what is the share of those imported from other countries.

1. Food, Identity and Territory

Dietary practices are a major construction areas of identity, within which food serves as a powerful case of meanings, a vehicle for individual and community representations, both self-directed that heterodirect (Neresini and Rettore 2008). The messages transmitted by a food culture can be of various nature but, in any case, always communicate identity values. May be included, in fact, the economic identity, which manifests itself, for example, through the use of precious and refined foods as a sign of wealth; or social identity, since, especially in the past, the quantity and quality of food were in close relationship with the belonging to a specific class. The food, in fact, was the first way to show off the class differences. Even religion links its identity to foods, for example, the bread and wine of the Christians go far beyond the material dimension; the diet of the monks has its own rules, as well as Lent which includes abstinence from certain foods. Moreover, in many religious contexts, some exclusions or food taboos (pork and wine of Islam, the complex series of licit and illicit foods of Judaism) have the prevailing role of a belonging report. Through foods can be expressed, also, philosophical identity, such as vegetarian diets linked to the respect of living nature (Barillaro, 2005).

Finally, the Alimentary Culture in the broadest sense may coincide with the ethnic identity of an entire nation. It is not uncommon to associate a particular type of food to a particular nationality or population: for example Italians are associated to the pasta; Chinese to the rice and German to the beer (Montanari, 2000). This happens because each culture has adopted and codified specific food rules that prefer some foods over others, codes based on different factors, such as the environment, the history and the geographical position. In this perspective, food then becomes not only necessary for survival, but also a true cultural necessity (Spagna, 2015).

* Giovanna Galeota Lanza. Department of Political Science, University of Naples Federico II.
E-mail: giogaleotalanza@libero.it.

On the basis of the above, it is clear that between food and nutrition you establish a strong relationship rooted on a symbolic level. This relationship is linked to personal and social identity stabilization processes. Food, together with the practices of preparation, cooking and presentation accompanying the consumption, helps to anchor the individual in his social space and also creating an intimate connection with the territory in which he lives.

This happens because of cultural elements related to the individual's position in the social stratification and in connection with his accession to a lifestyle and to an ideal model. "You are what you eat", it has been said (Caplan, 1997) and between eating and being there is an intense, reciprocal, dynamic and indissoluble relationship. After all, the taste-setting process is a process of identity construction: not only we are what we eat, but we eat what we are, we nourish ourselves of our history, and our symbols.

In the current stage, the relationship does not appear to be driven by increasingly converging forces. Over time they have established consumption patterns placed on global movements that move in a transversal way on a planetary scale. It is mass foods, or regarded as such, without a clear territorial anchor (the typical global food), or of dishes that have, at least symbolically, local roots even if characterized by a planetary diffusion: the pizza, sushi or the Chinese food. Nevertheless, these forces overpowering and depersonalizing, that have characterized to a large extent the stage of late modernity, are processes of re-anchoring the territory (Dematteis, 2001) that recognize food as a cultural heritage to be safeguarded. This is as true in small communities, as in the macro-regional reality characterized by the same lifestyles and, therefore, by the same nutritional patterns.

A signal in that direction, came following the UNESCO Convention on Intangible Heritage of Humanity (signed in 2003 and operational since 2005), in which were included in 2010 the Mediterranean Diet (MD), the French and Mexican cuisine (Italian UNESCO Commission, 2010). In these cases, food cultures have been assessed as testimonies of traditional practices and useful knowledge for the life of all mankind.

The recognition of the MD was linked to the very meaning of the original word in the ancient Greek language *diaita*, namely lifestyle. A real *modus vivendi* based on socio-cultural and environmental values shared by all nations bordering the same sea. It is a series of foods that are consumed mainly through forms of sociability and rituality that reinforce social cohesion and are a traditional knowledge respectful of natural resources and biodiversity, an example of sustainable development of links between material and immaterial culture.

The MD was considered, in fact, as a "set of skills, knowledge, practices and traditions ranging from the landscape to the table, which include the cultivation, harvesting, fishing, conservation, processing, preparation and, particularly, the consumption of food. It is characterized by a nutritional model remained constant over time and space, whose main ingredients are olive oil, grains, fruits and vegetables, a moderate amount of fish, dairy products and meat, many seasonings and spices, all accompanied by wine or infusions, always respecting beliefs of each community "(Italian UNESCO Commission, 2010). It is, therefore, not only a nutritional scheme, but also a genuine form of social interaction promotion, carried out through customs and celebrations, which succeeded in giving birth to "a formidable body of knowledge, songs, proverbs, stories and legends "(Italian UNESCO Commission, 2010). These elements constitute the added value that motivated the choice of UNESCO, which sees the protection of diet combined with respect for the territory, ensuring the preservation and development of traditional activities and crafts linked to fishing and farming in the Mediterranean community (Colella, 2013).

Put at the table for centuries, the MD is therefore the result of the constant sharing of traditions, innovations and creativity and, even today, it remains in the eating habits of most of the basin populations. Yet, even if we are talking about a real lifestyle, it's mostly food and raw materials (vegetables, fruits, cereals, olive oil) that, as such, can not escape the logic of the globalized market.

The food internationalization process has, in fact, resulted in the maximization of the exploitation of natural sources of food and increased food trade for each country. Have gradually been created, thus, more and more long chains of production, procurement, processing, packaging and distribution of food.

The pressure of the agro-industrial lobby and shopping to conquest of markets, resulted in the increase of food exports (subsidized) by the North of the world and generated dumping against several small farmers and retailers, especially in developing countries, who were unable to withstand the competition of produced from foreign commerce. Although foods are not necessarily produced to be exported beyond the borders of each country, global markets today impose the rules of the game, and food commodities have become a means of financial investment on a par with any other commodity handled on the stock market (Parascandolo, 2013).

The European countries bordering the Mediterranean, and among these, in particular, Italy and France, can be considered as the cradle of the typical MD food products. However, even in such countries, although characterized by a high per capita income, local agricultural production, especially those to small-scale, must compete with the constant use by the processing industries to globalized production circuits.

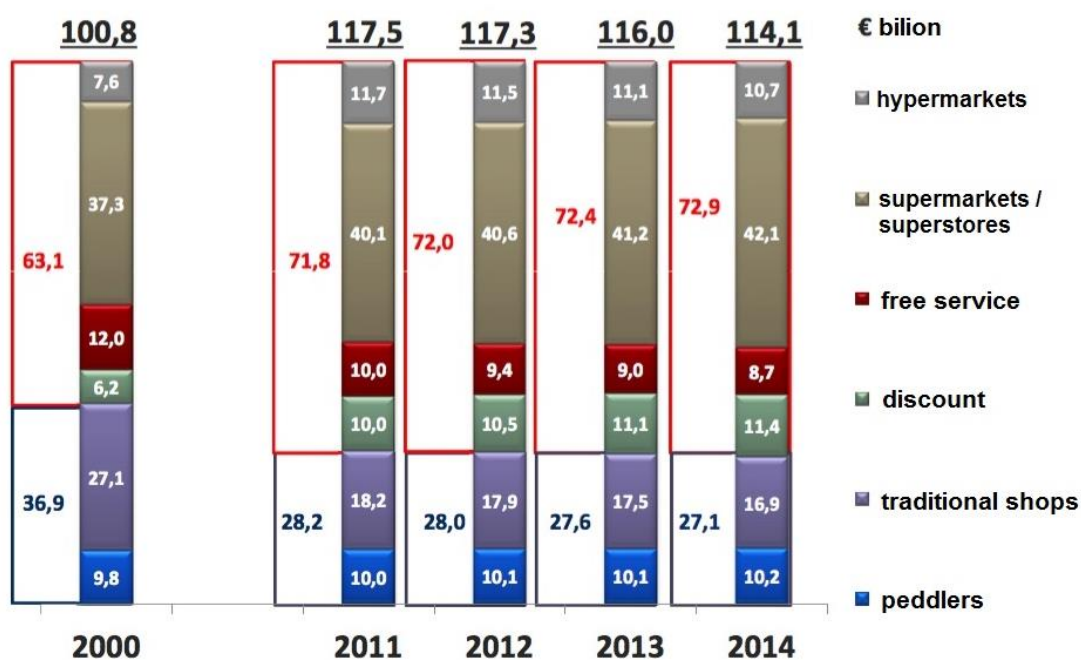


Figure 1: Evolution of the share of food distribution channels in Italy (%)
Source: AC Nielsen, 2015

This allows, to such industries, a considerable reduction in production costs in order to meet the increasing demands from, above all, the Great Organized Distribution (GDO). This sector is controlled, particularly in Italy, almost entirely by foreign multinationals, whose interest is to offer the most competitive prices on the market regardless of the geographical origin of the products. Moreover, always related to the Italian situation GDO is a growing steadily channel.

Since 2000, the weight of the GDO has always been greater than that of so-called traditional channels (Peddler and retail shops). This weight also increased over time, from 63.1% in 2000 to 72.9% in 2014, by contrast, has declined in other channels that passed from 36.9% to 27.1% (see Fig . 1).

In literature, there are several studies about the relationship between the food industry and the GDO, especially in relation to the effects that such links have in influencing the inflation process, affecting the price charged to consumers. Among them, the older, state that the size reached by the GDO can be useful to counterbalance the market power exercised by big industry (Galbraith, 1952), while other, more recent, argue that the high concentration in the distribution sector is likely to excessively broaden its market power (Lloyd et al., 2006). This would result in a decrease in the bargaining power of agricultural enterprises in the supply chains, resulting in the spreading of unfair trade practices.

About the origin of products, as will be explained later, the existing mandatory measures in Europe only consider certain types of foods, while for many others the information may be omitted, compromising their full traceability. The consumer may be, therefore, in a position to buy a product which comes under Mediterranean way of life, but that's probably not entirely Mediterranean, uprooting consciously or unconsciously from the territory of which he feels part of.

2. The flows of import and export of food production in Italy

The production and consumption of food, as repeatedly stated, are the expression of a set of relationships, often informal, which constitute the tissue of social life of a community, whose persistence allows to keep alive the traditions and cultures that would otherwise be lost. Despite this, do not always coincide with the geographical place in which they are acquired and recognized as symbols of local food culture is often the case that the country of origin of the raw material used in the production of foodstuffs, (this happens, for example, as we will deepen later, with grain and pasta).

Understood in this sense, the recognition of the MD as a cultural Heritage is a starting point to make several reflections on the dynamics of the Italian food industry. Moreover, the meaning of the term "culture" in Latin is derived from *cultus*, the past participle of *còlere*, meaning cultivate.

The agricultural sector is an important component of Italian trade with foreign countries, with a weight in terms of trade volume (exports plus imports) of approximately 9% (ISTAT, 2016). The balance of the Italian agri-food trade has been, over time, structurally and permanently negative (see Figure 2).

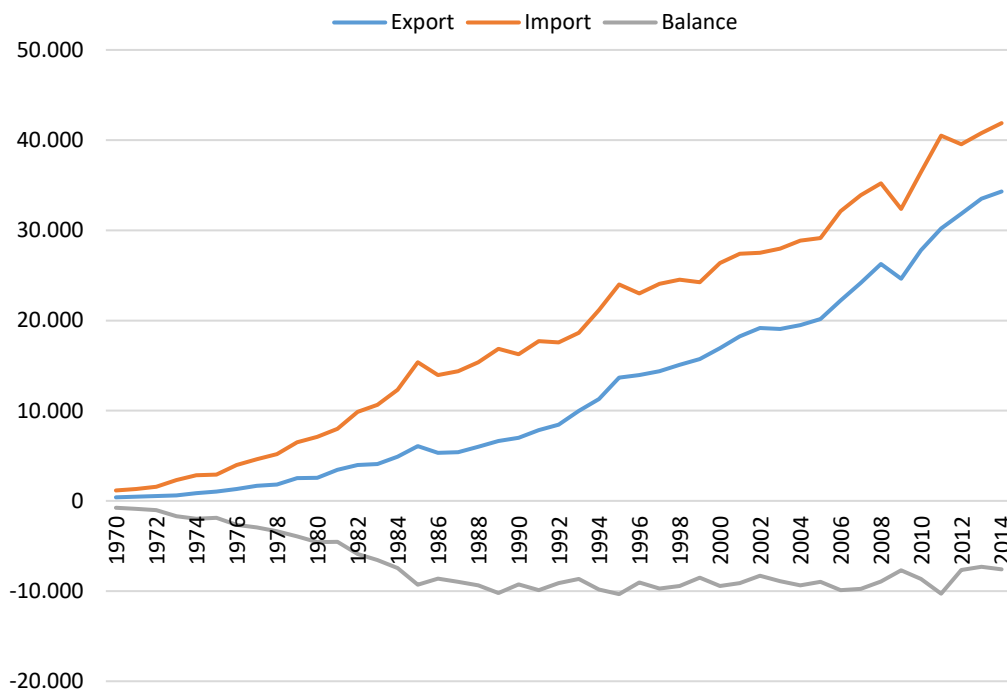


Figure 2: Trends of agri-food trade in Italy from 1970 to 2014 (million EUR)
 Source: Elaborations on ISTAT data, 2016

This has contributed significantly to the deficit of the Italian trade balance and is also a component in some ways hardly compressible, as resulting from the structure of the Italian primary sector, from the dependence on imports of certain agricultural and food consumption, as well as by the need to import raw materials for the domestic processing industry.

In this regard, it must be stressed that the Italian agro-food balance encompasses two components that differ greatly among themselves, ie the balance of the primary sector, which is very negative and rather stable over time and that of the transformed component (food industry), which tends to be much closer to break even and still constantly improving. This confirms the well-established trade specialization of the Italian food system based on the processing of agricultural products imported from abroad.

This pattern of specialization claimed over time Italy's position as an exporter of processed products (including from farms that include the process of primary processing within them) (Henke, 2008 Salvioni, 2011). This choice was dictated by the geographic and climatic conditions of the country, due to the scarcity of land, and for the specific natural conditions, has to import most raw materials.

In Italy, moreover, it is estimated that, from the Seventies to the first decade of the millennium, the utilized agricultural area has decreased by 28%, falling by about five million hectares (nearly eighteen million in 1970 to just under thirteen 2010) , ie an area equivalent to Lombardy, Liguria and Emilia Romagna together (ISTAT, 2010). The greatest decrease was mainly the area with arable crops and permanent grassland, namely

the areas from which come the main base of Mediterranean food products, including bread, pasta, vegetables, meat and milk¹.

However, the reason of substantial food imports is also the result of the industrialization and modernization of the primary sector process that, if in the past responded fairly well to its main production feature for domestic food use (Fabiani, 1986 and 1996), today for the renewed role of agriculture in economy and society (Sotte, 1997, De Benedictis and De Filippis, 1999, De Filippis and Henke, 2009, Sardone, 2012), can not support the entire domestic demand. In other words, there is a tendency towards multi-functionality of agriculture, which is no longer seen only as a supplier of raw materials for the food market of the country, but as a sector capable of reaching international markets and / or produce innovative goods such as biomass or biodiesel.

In order to better understand the structure of the Italian agro-food trade, it is useful to analyze a recent study by the Council for Research in Agriculture and Agricultural Economy Analysis (CREA, 2015) which identifies the geographic distribution of total food flows (Table . 1). The analysis examines some groups of countries identified by their geographical proximity and membership in free trade areas or to the presence of trade agreements of various kinds. Therefore, beside the aggregations of countries by geographical continents, are WTO members, members of other free trade areas (the European Economic Association - EEA, MERCOSUR) and countries that have trade agreements with the EU (EUROMED).

Regions	Import	Export	Balance
World	41.991	37.208	-4.782
Wto	41.460	36.013	-5.447
Ue 28	28.889	24.464	-4.425
Other European countries (No Med.)	1.286	2.339	1.053
Third Countries Med. Europeans	127	216	89
Third Countries Med. Asian	730	564	-166
Third Countries Med. Africans	789	692	-97
North America	1.702	2.673	24.020
Central America	533	161	-372
South America	2.970	333	-2.636
Mercosur	2.074	220	-1.853
Asia (Excl. Med.)	3.335	3.029	-306
Asean	2.080	425	-1.655
Africa (Excl. Med)	1.189	434	-755
Oceania	441	520	79

Table 1: Italy's total agri-food trade by geographical area, 2015 (millions of current euro)

Source: Report on Foreign Trade of food products 2015. CREA, 2016

The destinations of the Italian agro-food trade are highly concentrated and, above all, strongly influenced by membership of the European Union, since the existence of a

¹ Even though up to now, the loss of agricultural area have not resulted in a proportional loss of agricultural production (and therefore lack of food availability), thanks to the introduction of new techniques that have allowed to increase the productivity per hectare and intensify livestock activities, currently, the increase of the inputs on the lands is no longer able to increase the production. This led, therefore, to the point where the application of larger amounts of available technologies no longer corresponds to an increase the performance of cultivated land.

common commercial and agricultural policy has dictated, often and for a long time, a number of constraints and conditions. To these must be added also the seasonality and perishability of agricultural and food products, which often influence its timing and method of transport, especially over long distances.

As was to be expected, Table 1 shows that, in 2015, the most important trade partner, both with regard to exports and to import, is the EU's area 28. The second area is represented by Asian countries (non-Mediterranean) with which there is the highest negative balance compared to all other geographical identified areas.

With regard to exports among the top twenty countries recipients of Italian products, are placed in 2015 fourteen EU partners, including four of Eastern Europe (Poland, Czech Republic, Slovenia and Romania). It should be emphasized, however, that the number of outlet markets for Italian exports remains quite wide, with important partners in different continents, such as USA, Canada, Australia, Japan, China and Russia. Given the dynamics of import and export (see Fig. 2), the normalized balance between geographical areas configures Italy, on the whole, as a net importer of food products (Fig. 3).

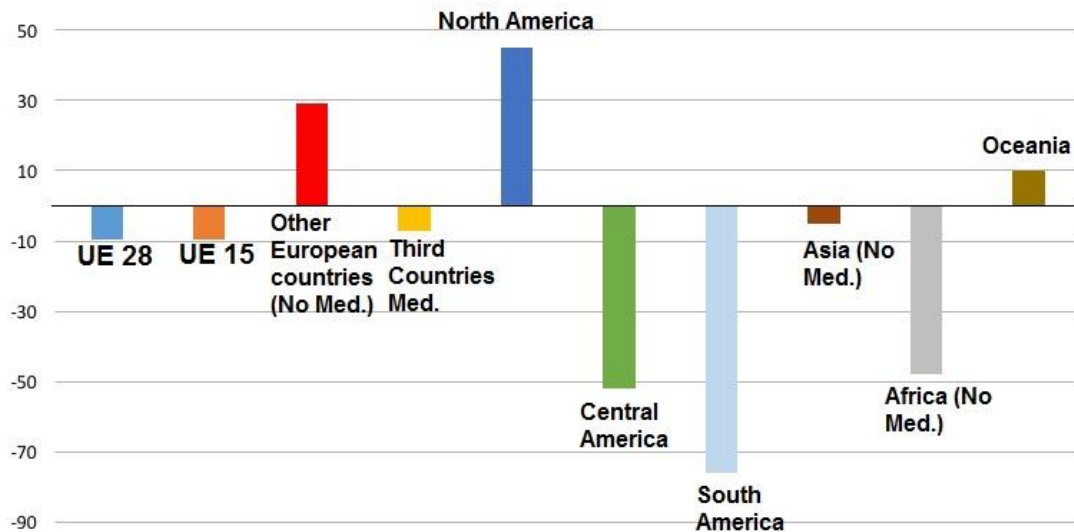


Figure 3: Balance of agribusiness normalized by region, 2015 (%)
 Source: Report on Foreign Trade of food products 2015. CREA, 2016

There are, however, important distinctions between the different areas analyzed. In fact, if on the one hand, Italy has a considerable trade deficit especially with Central and South America (-53.5% and -79.8%), with the non-Mediterranean Africa (-46.5%) and, to a lesser extent, with the EU (-9.5%), on the other hand, the balance is firmly positive with North America (+ 44%), other non-Mediterranean European countries (+ 29%) and Oceania (+ 8.3%) (see Figure 3).

Under the specific issue of imports, it is possible to achieve similar considerations to those already made for exports. In fact, Italy's main supplier is the European Union (68.8%), which is followed by Asia (non-Mediterranean) with a 7.9% and South America with 7.1% (CREA , 2016). From these observations it is not surprising that among the first twenty supplier countries of Italy there are twelve EU countries, including France and Germany which remain firmly in the first two positions (Fig. 4).



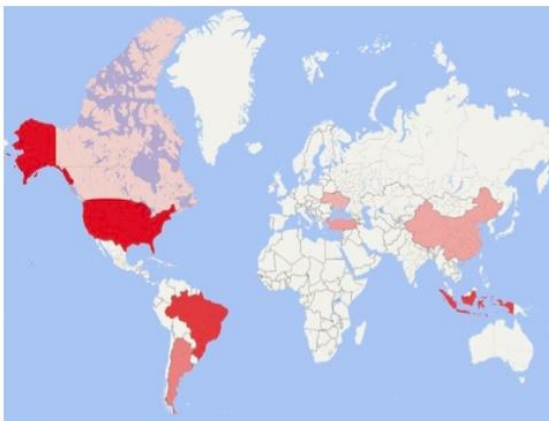
Countries	Absolute Value
France	5571.1
Germany	5279.2
Netherlands	4736.3
Austria	3212.1
Belgium	1189.2
Poland	1136.6
Greece	1076.1
Denmark	804.2
Hungary	769.9
United Kingdom	741.6
Ireland	555.1

Figure 4: Structure of the Italian agri-food imports. The main suppliers in the EU(2015)

Note: Million euro. Source: Based on FAO data, 2016

Source: Based on FAO data, 2016

Conversely, again in 2015, the first suppliers outside the European Union borders are the United States, on the second and third place, however, there are Brazil and Indonesia. Follow, then, Argentina, Turkey, China, Ukraine and, finally, Canada (see Fig. 5).



Countries	Absolute Value
United States	1114.4
Brazil	1023
Indonesia	1004
Argentina	762
Turkey	658
China	625.1
Ukraine	592
Canada	587

Figure 5: The principal non-EU suppliers (2015)

Note: Million euro. Source: Based on FAO data, 2016

Source: Based on FAO data, 2016

In relation to the product categories of imported food, the presence of primary products or to a lower degree of transformation is far larger. This proves the structural dependence on foreign suppliers in terms of raw materials for processing, not only in the case of goods not produced locally for geographical and/or climatic reasons, such as the raw coffee, but also to cereals, live animals, carcasses and fresh fish.

With regard to the geographical areas which are major suppliers of Italy, at the forefront of foodstuffs imported from EU countries there is a typical Mediterranean product, olive oil, of which 85.8% of the total imported comes from such area. From the European Union are also imported products for which Italy is structurally in deficit shortage of available land, such as those related to livestock or seafood chain (see Tab. 2).

Goods	Million euro	Good share %	Country share %
Olive Oil and Extra Virgin	1302	4,5	85,8
Washed fish	1234,9	4,3	62,5
Pork semi-finished products, fresh or chilled	1118,4	3,9	100
Semi-finished beef, fresh or chilled	896,5	3,1	99,3
Breeding cattle	775,2	2,7	100
Manufactured confectionery or cocoa	747,2	2,6	91,5

Table 2: Main imported food products from the EU 28, 2015

Note: Good share: share of the product on all the Italian agri-food imports in the analyzed.
Country share: share of area analyzed on the whole of Italian imports of the product in question
Source: Foreign Trade of food products 2015. CREA, 2016

From non mediterranean Asia come mainly palm oil (the total amount imported) and the raw coffee, as well as other fish products (cfr. Table 3).

Goods	Million euro	Good share %	Country share %
Palm oil	738,4	22,1	99,9
Raw coffee	448,7	13,5	32,2
Frozen crustaceans and molluscs	355,1	10,6	26
seed oil and vegetable fats	321,7	9,6	36,9
Washed fish	176,5	5,3	8,9

Table 3: Major food imported from Asia (Non-med), 2015

Note: Good share: share of the product on all the Italian agri-food imports in the analyzed. Country share: share of area analyzed on the whole of Italian imports of the product in question
Source: Report on Foreign Trade of food products 2015. CREA, 2016

Of particular note are the purchases of durum wheat, which comes to 68.6% of total imports from North America (see Tab. 4). The specific case of durum wheat is important because it is a product of the chain of the pasta of which Italy needs supplies from abroad, despite the non-marginal internal production and although it represents the raw material at the base of the MD.

Goods	Million euro	Good share %	Country share %
Durum wheat	578,5	34	68,6
Almonds	172,5	10,1	55,6
Soybeans	111,2	6,5	28,7
Flour and feed	111,0	6,5	6,9
Walnuts	51,8	3	34,7
Dried beans	48,4	2,8	36,4

Table 4: Main food imported from North America, 2015

Note: Good share: share of the product on all the Italian agri-food imports in the analyzed.
Country share: share of area analyzed on the whole of Italian imports of the product in question
Source: Report on Foreign Trade of food products 2015. CREA, 2016

From the framework outlined emerges, therefore, not only a structural dependence of the Italian agri-food sector but, also, the presence of food imported from non-Mediterranean countries, although these fall fully in typical MD foods: indeed, as in the

case of durum wheat, even characterize it. This suggests, therefore, that although the UNESCO recognition tent also, as already pointed out, to ensure the preservation and the development of traditional activities relating to fishing and farming in the Mediterranean communities, often global dynamics push in exactly the opposite direction.

3. An analysis of Italian imports of durum wheat and processed tomatoes

Symbol of Italian style and recognized around the world as such, pasta with tomato sauce is, in Italy, the symbol par excellence of the MD. Yet, considering the above, it can be assumed that not always the durum wheat used in pasta production is of Italian origin, or at least Mediterranean.

In order to understand from where, and to what extent arrive the raw materials and food products commonly used for the preparation of the plate that identifies the MD in Italy, the two categories of foods that compose the pasta with tomato sauce and, therefore, the aforementioned durum wheat for pasta and processed tomatoes for the sauce, will be analyzed below.

Durum wheat is a minor cereal and accounts for only 5% of the total wheat. Unlike common wheat, which is cultivated everywhere in the world with the exception of tropical areas, durum wheat is grown mainly in three areas: the Mediterranean, the "Northern Plains" between the United States and Canada (North Dakota and Montana in United States, Saskatchewan and Alberta in Canada), as well as in the desert areas of the South East of the United States (California and Arizona) and northern Mexico (Baja California and Sonora).

In addition, other regions are relevant for the production of durum wheat though of minor importance: Australia, Russia, Germany, Kazakhstan, Argentina, India and Ukraine.

In the Mediterranean region, total wheat production is very variable and, because crop requires a lot of rain, this influences crop yields, especially in North Africa, where the problem of drought is stronger. Therefore, the total production may vary from 14 million tons, as for the 2014/15, to 18 in 2015/16, to a maximum of 20, as it happened sometimes in the past (International Grain Council, 2016).

The demand of durum wheat in the Mediterranean countries is, however, much higher than local productions, and then are imported more than 5 million tons every year. Among the countries in this area, Italy is the largest producer of durum wheat, with an annual average of about 4 million tons, and at the same time, it is the world's largest importer of durum and common wheat (Tab . 5). This can be explained, above all, since this is the only type of grain used in the production of pasta, of which the country is the world's largest producer. Italy, therefore, needs to import large quantities to meet the needs of the milling and Pasta Industry, that has to meet a large domestic demand and an equally strong foreign demand. Italy is in fact the first exporter of pasta (including cooked or stuffed) in the world. Only in year 2015, it has exported more than 2 million tons, four times more than the world's second largest exporter, China, which in the same year has exported about 500 thousand tons (Conagricoltura Studies Center, 2016).

EXPORT	<i>Value (\$)</i>	<i>Volume (t)</i>	IMPORT	<i>Value (\$)</i>	<i>Volume (t)</i>
---------------	-------------------	-------------------	---------------	-------------------	-------------------

Canada	6.206,41	23.552,92	Italia	2.031,39	7.148,35
USA	5.577,50	21.047,68	Giappone	1.652,45	5.530,69
Australia	4.371,50	17.053,21	Brasile	1.216	5.170,44
France	4.264,78	19.817,25	Spagna	1.201,72	5.486,60
Russia	3.948,72	21.234,23	Olanda	1.158,09	5.928,12
Germany	2.415,77	10.767,72	Tailandia	1.132,39	4.556,09
Kazakhstan	1.244,42	3.133,83	Turchia	1.103,42	4.349,82
Argentina	1.034,63	4.318,21	Messico	1.027,98	4.182,85
Poland	852,70	3.932,01	Germania	984,17	4.474,70
Romania	769,34	3.555,28	Filippine	982,11	3.384,64

Table 5: World trade of wheat *. The top ten exporting countries, and the top ten importers, 2015

Note: Durum wheat and common wheat, including flour
 Source: Elaboration on data UN Comtrade Database, 2015

The world's major wheat exporters are Canada and the United States (Tab. 5) which are also the main suppliers of the Mediterranean countries.

In particular, Canada is the largest producer of wheat in the world, its annual production is between 4 and 6 million tons, of which over 80% is produced in Saskatchewan. This country is also the one that exports about half of the total quantities needed in Italy in 2015 (see Fig. 6).

The only two Mediterranean countries from which comes the durum wheat imported from Italy are France and Greece, but with much smaller amounts compared to Canada.

Additional factors that could explain the massive import of durum wheat in Italy, can be connected both to the strong volatility in food commodity prices and to changes occurred during the years of the Common Agricultural Policy (CAP) promoted by the European Union.



Countries	Absolute Value
Canada	1113
France	399
United States	303
Mexico	295
Greece	272

Figure 6: Import Italian durum wheat, 2015 (Million euro)

Source: Elaborations on data CSConfagricoltura, 2015

Regarding the first highlighted aspect, what should be emphasized is the recent fall of the grain prices on the international markets. The revenues for farms, in fact, are no longer sufficient to offset the costs and this causes the bankruptcy of some farms or the abandonment of the durum wheat cultivation by others. This is because durum wheat, in particular, has a lower return than the common wheat (CS Confagricoltura). However,

this phenomenon is a structural aspect of the grain market, characterized by significant price volatility.

Years	Price index	% Variations on previous year
2007	179	-
2008	235	31,30%
2009	154	-34,50%
2010	169	9,70%
2011	214	26,60%
2012	204	-4,70%
2013	194	-4,90%
2014	181	-6,70%
2015	144	-20,40%
2016	127	-11,80%
% Var. 2008/2007	31,30%	
% Var. 2009/2008	-34,50%	
% Var. 2011/2009	39%	
% Var. 2016/2011	-40,60%	

Table 6: Indices of average prices of grain on world markets (average 2002-2004 = 100)

Source: FAO data on International Grains Council, 2016

In fact, looking at the trend of the indices of the annual average prices in the period 2007-2016 (FAO on the International Grains Council data) are evident the frequent variations that characterize grain prices. During the period, there were two peaks, in 2008 and 2011, followed by heavy downsizing that, in the space of a single year, exceeded 30%. From 2011 to 2016 the price index marked a further drop about 40% (Tab. 6).

The Italian market for wheat, and particularly for durum wheat, is heavily influenced by the global grain market. For example, soaring prices in 2007 is due to poor national harvest, accompanied by the low availability of the product at world level, which led the market price up to more than 500 euro per ton. Conversely, after the harvests of 2008, the scenario has completely changed, domestic production was very high as well as at global level, so prices are back to a very low level.

The high volatility of prices, as appears from the data, is a constant feature of the grain market. This is also a consequence of the increasing globalization of trade, often governed by commercial strategies, rather than on objective economic conditions (relationship between production and consumption). In particular, Italian farmers still have little power in the management of the stocks, which are handled by operators often driven by interests very far from those of primary producers.

A further feature of durum wheat regards the effect that the CAP had on it. Until 2004, in fact, durum wheat received a very high coupled aid (about 500 euro per hectare) from the European Union. This has conditioned the decisions of farmers, especially in Italy and Spain, and had a great influence on cultivated areas. In 2005, after Fischler Reform, aid being decoupled from production and from the crop choices of farmers, this resulted in a strong fall in durum wheat seeded areas (ISMEA, 2011).

The freedom granted by the CAP to agricultural enterprises in order to prefer the production of goods most frequently requested by the market if, on the one hand, has

reconnected the agro-food sector to market logic and relaunched competitiveness, on the other hand, triggered a process of partial abandonment of certain products, helping to create difficulties in the supply of raw material intended for those involved in the later stages of food chains (Velazquez, 2005). Within the cereal sector, the production of durum wheat which received highest financial aids than other crops (to offset the diseconomies resulting from soils low productivity, due to inability of alternative crops) has suffered greatly after the decoupling aid, and this led to a sudden restriction of the supply (ISMEA-Italmopa, 2011).

Logically this had great influence on the amount of durum wheat produced in Italy. Nevertheless, there is another cause that explains the reason of the large imports of durum wheat. This cause is connected to the quality of the culture, that much influence the market choices. The quality of Italian durum wheat, in fact, not average, satisfies the internal needs, due to black point and insufficient protein. For this reason, Italy imports durum wheat even when, from a strictly quantitative point of view, would appear self-sufficient. The country is, therefore, forced to import higher-quality durum wheat to mix with the poor quality obtained from domestic production.

The other food commonly used in the preparation of pasta with tomato sauce is, of course, tomato and especially processed tomatoes.

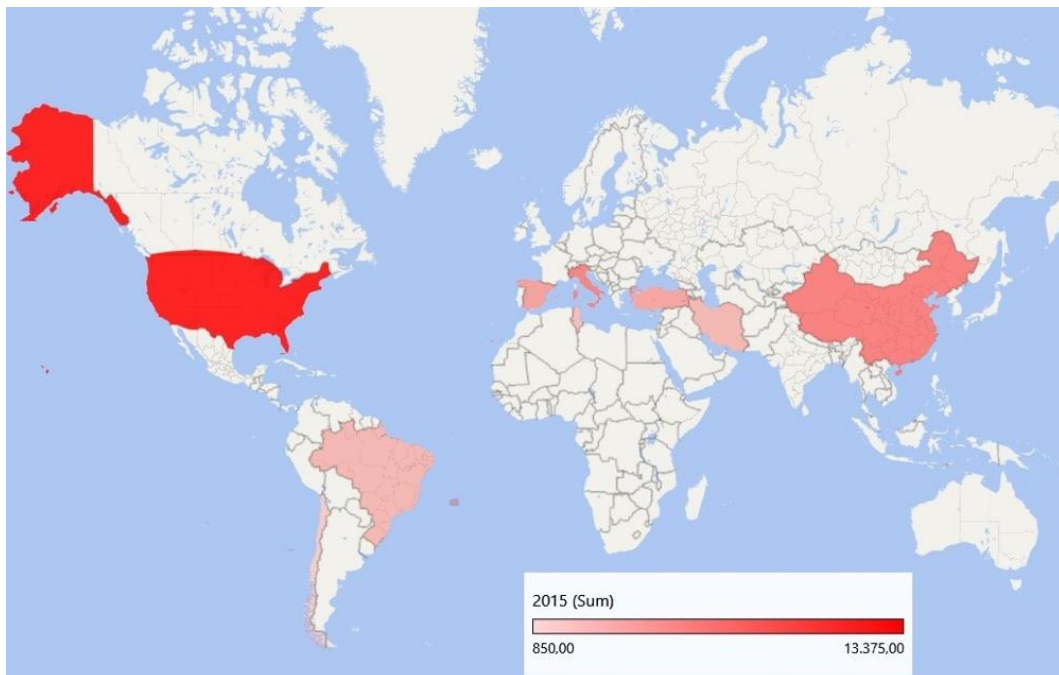


Figure 7: Processed Tomatoes major manufacturers, 2015

Source: Elaboration on data World Processing Tomato council -WPTC-, 2016

The first three world producer of processed tomato are the United States, particularly California, China and Italy, followed by Spain, Turkey, Brazil, Iran, Tunisia and Chile (Fig. 7).

In Italy the tomato processing activities, as well as the production of the agricultural raw material, is highly concentrated at the regional level. The transformation of tomato, in fact, is concentrated in two regions, Campania and Emilia Romagna. In Emilia Romagna both production and processing of tomato take place at local level, maintaining, therefore, a good balance between the production area for the supply of the agricultural raw material and the area of industrial processing; the region is also characterized by a

high production of tomato paste (Lombardi, Verneau, 2008) compared to other types of derivatives (peeled, tomato pulp, tomato puree). The scenario is different in Campania, where the tomato processing is much more fragmented. In this region, in fact, there are about 100 factories most of which are located in the Agro Sarnese-Nocerino. They, compared with the Emilian competitors, have a lower average processing capacity (approximately 3000 tons per year) and mainly focused on the production of peeled tomatoes, market in which they have a monopoly position. In Campania, almost all of agricultural raw material comes from Puglia, which completes the production chain on supra-regional scale.

With regard to the Italy import/export flows in 2015, Table 7 shows a basic balance between imports and exports of tomato processed taken as a whole. The most exported product is peeled tomatoes which covers over 60% of exports.

However, the situation changes when analyzing trade flows of tomato paste. This kind of product, in fact, is characterized by a very high negative balance caused by substantial imports, of which more than 40% comes from China (ISMEA, 2016).

	Export		Import		Balance	
	Value (€)	% var. 2015/2014	Valore (€)	% var. 2015/2014	Valore (€)	% var. 2015/2014
Fresh/ processed vegetables	3.584.767,90	6,1	2.346.973,60	9,1	1.237.794,30	0,9
Tomato processed	1.569.804,20	2,8	191.482,20	20,8	1.378.322,00	0,7
Tomato paste	103.392,70	-8,6	135.525,30	35,2	-32.132,60	-349,2

Table 7: Tomato processed import / export Italian 2015

Source: Elaboration on data ISMEA, 2016

Imports of tomato paste from China showed a strong growth trend (Fig. 8). These imports increased by 423% in just three years, from 2013 to 2015 (ISMEA, 2016).

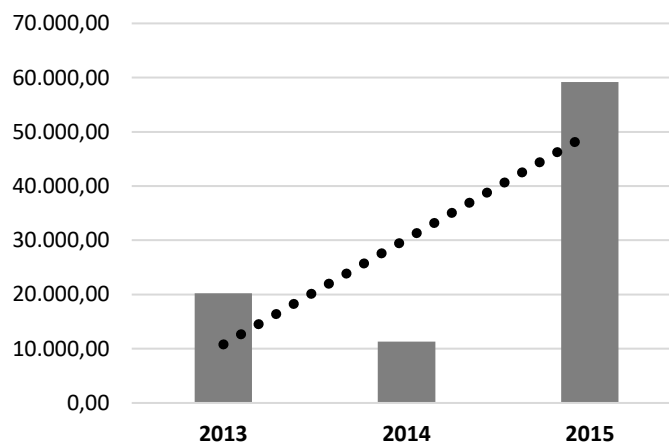


Figure 8: Increased Italian imports of tomato paste from China, years 2013-2015

Source: Elaboration on data ISMEA, 2016

Although a preponderant share of imported tomato paste is then exported, after being perfected through a rework process (ANICAV, 2016), should not be underestimated the risk that the Made in Italy could run. In fact, on the labels of cans intended for distribution channels, there is only an obligation to indicate the place of packaging and not that of cultivation of the raw material. However, the most striking fact that is true both for durum wheat and concentrated tomato, is the significant loss of weight of agriculture in the supply chain, especially when one considers the food products passing through the transformation. Indeed, in the total value chain from field to table, the share of agricultural producers fell over the past decade from 8.5% to 6% (ISMEA, 2010). Conversely, is the stage of distribution, in particular the GDO, to capture a growing and by far predominant share of the value paid by consumers. The analysis of imports of durum wheat and tomato paste, points out that there is a gap between the local food culture and the true origin of the raw materials processed.

Both categories examined in fact belong to the components of the DM foods list, but, in both cases, were found large quantities of imports, predominantly from non-Mediterranean countries. This creates, therefore, a loss of identity, which is reinforced when the consumer buys a product without the ability to receive all the information related to its traceability. Currently the legal reference at European level in which it is addressed the problem of the origin is the U.E. Regulation 1169/11. That Regulation has introduced a definition (rather tautologically) of "place of origin", corresponding to "any place indicated as being that from which comes the food." The notion is distinct from that of "country of origin", which, however, refers to the origin of that product (as determined in accordance with Articles 23 to 26 of Regulation (EEC) n. 2913/92). This is the place where the goods were wholly produced and, in the case where two or more countries have contributed to the production process, the place where it underwent its last substantial transformation. This is a new departure from previous requirements which spoke about the "place of origin or provenance" without specifying at all what was meant by these terms or the terms in which they were alternatives. It is, therefore, clarified that the origin is the one obtainable from the rules of the European Customs Code. The strangeness of this provision of law is the reference to the Customs Code of 1992, which is now repealed (Borghi, 2014). The European legislator added, then, a further and important clarification. Namely that relating to the fact that the applicant's name, business name and address of the food business operator placed on the label (indication that applies pursuant to Art. 8 of the regulation to identify who is commercially responsible) can not be understood as a surrogate indication of the country of origin or place of provenance. These are two completely different directions, with different purposes.

However, there is no obligation of indication of origin on the label for all types of food, provided that its omission would not mislead or confuse consumers, in this case it becomes obligatory.

The aforementioned 2011 EU regulation adds to the typologies already covered by the earlier Regulations (beef, fresh fruit and vegetables, eggs, honey, fresh milk, chicken, tomato puree, olive oil used) the fresh meat from pigs, sheep, goat and poultry, processed meat, as well as other types of meat and dairy products. However, many foods are still excluded, for example, rabbit meat, fruit and vegetables transformed, the cheeses, but also the pasta and the derivatives of tomato different from the past (eg. Concentrated tomato). In Italy, recently, the Ministry of Food and Forestry Policies has proposed a decree that introduces the mandatory indication of the origin of the durum wheat for pasta industry.

The measure, which is still pending before the European Commission, responds to a growing need for transparency and information to consumers and will allow for more clarity on the origin of the wheat and semolina that characterize the quality of pasta made in Italy.

4. Conclusions

The identity of a place can be found in the dishes that are brought on the table. The tastes and smells of the food show the special features related to land, climate and culture that define the different territories.

The analysis proposed here showed that the processes of globalization, affecting the deterritorialization of products, end by detaching consumers from their local food culture. This is more accentuated by the lack of transparency with respect to traceability of products sold in the retail channel.

At this point, one might ask, what remains of the Mediterranean in the Mediterranean diet? One can not answer this question only by looking at the agri-food trade flows. One must take into account the tradition, culture and knowledge that, as in the case of the production of durum wheat pasta in Italy, are part of the territorial milieu and can not be imported or exported. Therefore, there is still much of Mediterranean, in spite of everything. The hope is to be able to value even more the products that are part of the local traditions and, above all, make it fully transparent on labels the traceability of agricultural raw materials and, in general, of food products, in order to provide greater awareness to the consumer.

5. References

- Arfini, F., G. Belletti and A. Marescotti (2013), "Prodotti tipici e denominazioni geografiche strumenti di tutela e valorizzazione", in *Gruppo 2013, Quaderni*, Edizioni Tellus
- Atkins, P.J., P. Lummel and D.J. Oddy (2007), "Food and the City in Europe since 1800", Aldershot, Ashgate
- Barillaro C. (2004), "L'alimentazione tra cultura e identità", in G. Palangiano & G. De Santis (eds), *Geografia dell'alimentazione*, Geografia Medica, Ottavo seminario internazionale
- Bell, D. and J. Valentine (1997), "Consuming Geographies: We are Where We eat", Routledge, Londra
- Bestor, T. (2005), "How Sushi went Global", in J. Watson & M. Caldwell (eds), *The Cultural Politics of Food and Eating: A Reader*, Blackwell, Oxford
- Borghini, P. (2014), "Paese d'origine o luogo di provenienza", *Nuove regole per le informazioni sugli alimenti ai consumatori*, Trento
- Bridge, G. and A. Smith (2003), "Intimate Encounters: Culture - Economy - Commodity", in *Environment and Planning D: Society and Space*, n. 21
- Brunori, G., A. Rossi and F. Guidi (2012), "On the New Social Relations around and beyond Food. Analysing Consumers' Role and Action in Gruppi di Acquisto Solidale (Solida- rity Purchasing Groups)", in *Sociologia Ruralis*, n. 51

- Caldwell, M.L. (2009), "Food and Everyday Life in the Postsocialist World", University Press, Bloomington: Indiana
- Caldwell, M.L. (2013), "From the Editor", in *Gastronomica*, n. 13 <http://www.gastronomica.org/from-the-editor-winter-2013/>
- Caplan, P. (1997), "Food, Health and Identity: Approaches from the Social Sciences", Routledge, London and New York
- Colella, L. (2013), "La dieta mediterranea come patrimonio dell'umanità: dalla tutela dell'UNESCO alla legge regionale della Campania n. 6 del 2012", in *Diritto e giurisprudenza agraria, alimentare e dell'ambiente*, Franco Angeli. Milano
- Cook, I., et al (2013), "Food's Cultural Geographies Textures, Creativity, and Publics", in N.C. Johnson, R.H. Schein & J. Winders (a cura di), *The Wiley-Blackwell Companion to Cultural Geography*, Wiley e Blackwell, Londra
- Cook, I., et al (2011), "Geographies of Food: Afters", in *Progress in Human Geography*
- Cook, I. et al (2008), "Geographies of Food: Mixing", in *Progress in Human Geography*
- Cook, I. et al (2007), "Made in... ? Appreciating the Everyday Geographies of Connected Lives", in *Teaching Geography*
- Cook, I. et al (2006), "Geographies of Food: Following", in *Progress in Human Geography*
- Cook, I. and M. Harrison (2007), "Follow the Thing: West Indian Hot Pepper Sauce", in *Space and Culture*
- Cook, I. and P. Crang (1996), "The World on a Plate: Culinary Culture, Displacement and Geographical Knowledges", in *Journal of Material Culture*
- Cook, I. and T. Woodyer (2012), "Lives of Things", in T.J. Barnes, J. Peck & E. Sheppard (eds), *The Wiley-Blackwell Companion to Economic Geography*, Wiley e Blackwell, Oxford
- Cusimano, G. (2003), "Sotto il segno della cultura. Mondo attuale e New Cultural Geography", in C. Palagiano (eds), *Linee tematiche di ricerca geografica*, Pàtron, Bologna
- Dansero, E., M. Giorda and G. Pettenati (2015), "Per una geografia culturale del cibo", *Scienza attiva*, Ed. Special Expo Torino
- De Benedictis, M. and F. De Filippis (1999), "L'intervento pubblico in agricoltura tra vecchio e nuovo paradigma: il caso dell'Unione Europea", in M. De Benedictis & F. De Filippis (eds), *Manlio Rossi-Doria e le trasformazioni del Mezzogiorno d'Italia*, Lacaia, Manduria
- De Filippis, F. (2008), "L'Health check della Pac. Una valutazione delle prime proposte della Commissione", Edizioni Tellus, Roma
- De Filippis, F., (2012), "L'agroalimentare italiano nel commercio mondiale: specializzazione, competitività e dinamiche", in *Gruppo 2013, Quaderni*, Edizioni Tellus
- De Filippis, F. and R. Henke (2009), "La Pac verso il futuro. Una riflessione sui due pilastri della spesa agricola", Working Paper Gruppo 2013, n.13

- De Filippis, F. (2008), “La crescita dei prezzi agricoli: i fatti e le questioni”, in F. De Filippis (eds), *Prezzi agricoli ed emergenza alimentare*, Edizioni Tellus, Roma
- Dematteis, G. (2001), “Reti globali, identità territoriali e cibernazio”, in P. Bonora (eds), *Comcities*, Baskerville, Bologna
- Di Renzo, E. (2008), “Cibo geografico e neo-ruralità”, in *Annali Italiani del Turismo Internazionale*, n. 8
- Di Renzo, E. (2008), “Il “cibo locale” tra comunicazione mass-mediatica e marketing turistico del territorio”, in *Annali Italiani del Turismo Internazionale*, n. 7
- Di Renzo, E. (2008), “Mangiare geografico: i modelli alimentari nel Lazio tra tradizione e riproposizione culturale”, in *Documenti geografici*, n. 13
- Fabiani, G. (1985), “Criteri e metodi della pianificazione in agricoltura, in Evoluzione dei concetti e dei metodi nella pianificazione del settore agricolo”, Il Mulino, Bologna
- Fabiani, G. (1996), “L’agricoltura meridionale a un bivio: sviluppo di sistema o regressione”, in *Meridiana* e in *La Questione Agraria*
- Ferragina, E. (eds) (2015), “Rapporto sulle economie del Mediterraneo”, Il Mulino, Bologna
- Frascarelli, A. and F. Oliveri (2009), “I prezzi dei cereali in Italia Un’analisi delle serie storiche 1993-2008”, in *Gruppo 2013, Quaderni*, Edizioni Tellus
- Furesi, R., F.A. Madau and P. Pulina (2013), “Potere della distribuzione moderna nelle filiere agroalimentari: il caso dell’olio d’oliva in Italia”, in *Economia agroalimentare*, n. 1, Franco Angeli, Milano
- Galbraith, J.K. (1952), “American Capitalism: The Concept of Countervailing Power”, Houghton Mifflin, Boston
- Gasparini, M.L. (2004), Vino: cultura, alimentazione, salute, in C. Palangiano & G. De Santis, *Geografia dell’alimentazione*, Geografia Medica, Ottavo seminario internazionale
- Goodman D. and M.J. Watts (1997) (eds), “Globalising Food: Agrarian Questions and Global Restructuring”, Routledge, Londra
- Jackson, P. and N. Thrift (1995), “Geographies of Consumption”, in D. Miller (eds), *Acknowledging Consumption*, Routledge, Londra
- Jackson, P. (2002), “Commercial Cultures: Transcending the Cultural and the Economic”, in *Progress in Human Geography*
- Lévi-Strauss, C. (1966), “Mitologica I. Il crudo e il cotto”, Il Saggiatore, Milano
- Lloyd, T., S. Mccorrison, W. Morgan, T. Rayner and H. Weldegebrel (2009), “Buyer Power in UK Food Retailing: A ‘First Pass Test’”, in *Journal of Agricultural and Food Industrial Organization*, n. 7
- Lloyd, T., S. Mccorrison, W. Morgan, T. Rayner and H. Weldegebrel (2006), “Market Power in UK Food Retailing: Theory and Evidence from Seven Product Groups”, International Association of Agricultural Economists Conference, Gold Coast: Australia
- Lombardi, P. and F. Verneau (2010), “Il settore del pomodoro trasformato: tendenze di mercato, struttura e quadro istituzionale”, in *Economia agroalimentare*, n. 3, Franco Angeli

Montanari, A. (2002) (eds), "Food and Environment: Geographies of Taste", Società Geografica Italiana, Roma

Montanari, M. (2002) (eds), "Il mondo in cucina. Storia, identità, scambi", Laterza, Roma-Bari

Moro, E., *La dieta Mediterranea: mito e storia di uno stile di vita*, Il Mulino, Bologna, 2014

Neresini F. and V. Rettore (2008) (eds), "Cibo, cultura, identità", Carocci, Roma

Parascandolo, F. (2013), "Fra terra e cibo. Sistemi agroalimentari nel mondo attuale (e in Italia)", in *Scienze del territorio*, n.1, Firenze

Sardone, R. (2012), "Dieci anni di agricoltura italiana: le principali evidenze dell'Annuario Inea", in *AgriRegioniEuropa*, n. 29

Sotte, F. (1997), "Per un nuovo patto sociale tra agricoltori e società", in *La Questione Agraria*, n. 65

Teti, V. (1999), "Il colore del cibo. Geografia, mito e realtà dell'alimentazione mediterranea", Universale Meltemi, Milano

Winter, M. (2005), "Geographies of Food: Agro-food Geographies – Farming, Food and Politics", in *Progress in Human Geography*

Winter, M. (2004), "Geographies of Food: Agro-food Geographies – Food, Nature, Farmers and Agency" in *Progress in Human Geography*

Winter, M. (2003), "Geographies of Food: Agro-food Geographies – Making Reconnections", in *Progress in Human Geography*

Documents

Centro Studi Confagricoltura (2016), "Mercato del grano: dieci anni di instabilità"

CREA (2016), "Considerazioni CREA sulla qualità del grano italiano, con particolare riferimento contenuto proteico"

CREA (2016), "Rapporto sul Commercio con l'estero dei prodotti agroalimentari 2015"

IGC International Grains Council (2016), "Grain Market Report 2016"

ISMEA (2014), "I costi di produzione del frumento"

ISMEA and ITALMOPA (2011), "L'approvvigionamento dell'industria molitoria", Pubblicazioni - Cereali e colture industriali

ISMEA (2010), "Le tendenze dei prezzi nelle diverse fasi della filiera del frumento duro"

Ministero delle Politiche Agricole Alimentari Forestali (2010), "Costruire il futuro: difendere l'agricoltura dalla cementificazione. Perdita di terreni agricoli, approvvigionamento alimentare e impermeabilizzazione del suolo", MPAAF

UNESCO (2003), "Convention for the Safeguarding of the Intangible Cultural Heritage", Paris

Sitography

Confagricoltura: www.confagricoltura.it

CREA, Consiglio per la Ricerca in Agricoltura e l'analisi dell'Economia Agricola:
www.crea.gov.it

FAO, Food and Agriculture Organization: www.fao.org

IGC, International Grains Council: www.igc.int

ISMEA, Istituto di Servizi per il Mercato Agricolo Alimentare: www.ismea.it

ISTAT, Istituto Nazionale di Statistica: www.istat.it

WPTC, World Processing Tomato Council, www.wptc.to

Reference legislation

REGULATION (UE) N. 1169/2011

REGULATION (EEC) n. 2913/92