ORGANIC FARMING IN ITALY[1]

By Fabio Maria Santucci[2] and Filippo Pignataro[3]

Table of contents:

1. Introduction

The recent growth of organic sector in Italy can be considered a success story that deserves to be properly known and analysed. It is the result of several circumstances: the numerous food scandals which have afflicted Europe, the search for technical and economic alternatives by farmers, who have not yet decided to give up, the abundant flow of subsidies (direct and indirect) which have been channelled into the entire organic food chain. Nevertheless, it also represents the outcome of the first steps made by few pioneers who since the early '50s had started to criticize the path into which the so called technological progress and the agricultural policies were leading Italian and European farming. These pioneers were old and new farmers, medical doctors, shop owners and traders, food processors and consumers, veterinarians and agronomists, with some rare scientists, all of whom for more than 30 years have been struggling to convince the surrounding people and the Institutions that another food system is possible.

2. Area, farms and main productions

In the past years, the certified organic and under conversion agricultural area has increased from about 13,000 hectares in 1990 to over one million hectares on December 31, 2000 and at present it accounts for about 7.2% of total agricultural area in Italy (Table 1).

---

[1] Paper for the OECD Workshop on organic agriculture. Washington D.C., September 23-26, 2002.

[2] Associate Professor, DSEE, Faculty of Agriculture, Borgo XX Giugno 74, 06121 Perugia, Italy,
email fmsant@unipg.it. Presently at the World Bank, Washington D.C., email fsantucci@woldbank.org

[3] Ph Student, DSEE, email fpigna@unipg.it.

Table 1 - Organic farms and area, by Region.

Region	Farms (no.)				%	Area (ha) organic + conversion (d)				%	Organic+Conversion/ Total			
	1997	1998	1999	2000		1997	1998	1999	2000		1997	1998	1999	2000
Piemonte	1,016	1,793	2,102	2,144	4.5	17,175	34,985	38,445	44,557	4.2	1.5%	3.5%	3.4%	4.0%
Valle d'Aosta	6	6	5	9	0.0	332	452	144	157	0.0	0.3%	0.6%	0.2%	0.2%
Liguria	105	136	158	206	0.4	1,293	2,236	2,235	1,624	0.2	1.6%	1.8%	2.6%	1.9%
Lombardia	553	627	806	875	1.8	10,248	11,727	13,769	17,658	1.7	1.0%	1.3%	1.3%	1.6%
Trentino-Alto Adige	168	288	338	509	1.1	999	1,853	2,508	3,715	0.3	0.3%	0.5%	0.6%	0.9%
Veneto	662	699	748	904	1.9	6,039	5,018	6,732	13,092	1.2	0.7%	0.8%	0.8%	1.5%
Friuli Venezia Giulia	116	127	132	188	0.4	732	792	924	1,226	0.1	0.3%	0.4%	0.4%	0.5%
Emilia Romagna	2,212	3,369	3,501	4,358	9.2	46,473	72,197	82,222	101,777	9.5	3.8%	6.3%	6.7%	8.3%
North	4,838	7,045	7,790	9,193	19.4	83,291	129,260	146,979	183,806	17.2	1.6%		2.8%	3.6%
Toscana	616	788	985	1,269	2.7	22,784	26,156	36,887	55,752	5.2	2.4%	3.0%	3.9%	5.9%
Marche	1,254	1,470	1,283	1,373	2.9	22,471	29,674	32,423	35,805	3.3	4.2%	3.6%	6.0%	6.6%
Umbria	382	523	919	928	2.0	9,148	12,838	21,683	21,073	2.0	2.3%	3.4%	5.4%	5.2%
Lazio	1,993	1,813	1,913	2,201	4.6	25,885	26,473	27,409	36,346	3.4	3.2%	2.5%	3.4%	4.6%
Centre	4,245	4,594	5,100	5,771	12.2	80,288	95,141	118,402	148,976	13.9	3.0%	3.0%	4.4%	5.5%
Abruzzo	412	497	498	585	1.2	4,904	5,832	7,182	7,772	0.7	1.0%	1.1%	1.5%	1.6%
Molise	255	313	421	489	1.0	3,315	4,004	4,717	6,563	0.6	1.4%	0.8%	2.0%	2.7%
Campania	486	1,227	1,556	1,606	3.4	6,174	10,733	15,501	14,887	1.4	1.0%	1.7%	2.4%	2.3%
Puglia	4,275	4,827	6,664	5,869	12.4	94,875	100,099	130,002	132,932	12.4	6.7%	7.4%	9.1%	9.3%
Basilicata	183	265	318	406	0.9	5,224	6,966	9,531	12,174	1.1	0.9%	1.2%	1.6%	2.0%
Calabria	1,672	4,960	6,183	6,581	13.9	25,141	57,061	73,291	92,537	8.7	3.9%	7.4%	11.4%	14.4%
South	7,283	12,089	15,640	15,536	32.8	139,633	184,695	240,224	266,865	25.0	3.5%		5.9%	6.6%
Sicilia	8,270	9,598	9,434	8,811	18.6	125,903	128,917	142,966	162,486	15.2	8.2%	7.6%	9.4%	10.7%
Sardegna	4,754	8,287	8,358	8,046	17.0	135,797	250,058	304,487	307,206	28.7	10.0%	20.2%	22.9%	23.1%
Islands	13,024	17,885	17,792	16,857	35.6	261,700	378,975	447,453	469,692	43.9	9.1%		15.7%	16.5%
ITALIA	29,390	41,613	46,322	47,357	100.0	564,912	788,071	953,058	1,069,339	100.0	3.8%		6.5%	7.2%

Source: Bio Bank on data supplied by Certification Bodies.

The number of organic farms has increased in the decade 1990-2000 from 1,300 to 47,357 (Table 1). Most organic farms can be found in the two major Italian islands; Sardegna and Sicilia together account for about 36% of the total farm number, followed by Calabria and Puglia, also in the South of the Peninsula, respectively with 14% and 12% of the total farm number. Consequently, the sociological composition of organic farmers has totally changed: once they mostly were of non agricultural background, alternative people searching for a new life style, hippies or similar. Relatively important were the non Italians: Germans, Swiss, Austrians, also Americans, very often with good agricultural knowledge, but limited experience of Mediterranean systems. These pioneers shared a common goal and they established the first cultural associations, the first groups and cooperated with the few initial consumers to set up short marketing links. In the last decade, most newcomers are Italians, inexperienced in organic techniques, but with good knowledge of their ecosystem and much more market oriented than the first innovators.

A similar distribution appears for the area under conversion or already classified as organic: Sicily and Sardinia represent 44% of the Italian surface. Sicily is well known in the EU organic market for its citrus production: apart from the largest biodynamic citrus producer (Salamita: 1,100 hectares), other large fruit growers are Arabios (600 Ha) and APO Capo d'Orlando (1,000 Ha). The development in Sardinia is more recent and it is mainly due to the regional implementation of EU Reg. 2078/92; which gives subsidies also to permanent pastures, generally used by shepards for the local sheep breed, specialised in milk production. Other Regions, like Tuscany, Marche and Emilia Romagna were pioneering organic farming in the early'80s, but after the EU Regulation 2078/92 their rate of growth has slowed down and their share in total organic area and farm number has decreased.

As stated before, most of organic area (Table 2) is devoted to permanent pastures or to grass production (alfa alfa, for example), needed for restoring fertility or for rotation.

Table 2 - Land use in organic farms

Land use in 2000	%
Pastures and fooder crops	41,0
Other crops	20,2
Cereals	18,2
Olive trees	10,0
Fruit trees	7,3
Vineyards	3,3
Total	100,0

Source: Biobank, 2002

Since most farms are stockless (with some notable exception' like the Parmigiano area in Emilia Romagna, the sheep breeding area in Sardegna or the Chianina Cattle breeders in Umbria and Tuscany), most grass is sold to nearby farmers or used as green manure. Cereals follow, dominating the cropping pattern in regions like Puglia, Sicily and Emilia Romagna. Organic rice is grown in Lombardia and Piemonte. Olive trees characterize most of Italian landscape and therefore thousands of hectares have been converted into organic management, as well as vineyards. Large orchards can be found mostly in Emilia Romagna, while small scale production is scattered everywhere. The same can be said about vegetable production, that is lagging a bit behind the expectations, mainly due to technical problems and the comparative low level of subsidies.

Perspectives for future seem to be bright, since most farmers declare (Table 3) their willingness to expand and diversify their operations: notably, marketing is the major worry and the need for new marketing strategies affects 74% of the organic producers, who are searching for a premium price that sometimes is hard to materialize.

Table 3 - Forecasted development

Intention	%
New marketing systems	73,8
Expand the farm	49,1
More processing on farm	45,0
New crops	35,3
Sale point at the farm	29,9
More animal production	22,0
On farm tourism	19,8

Source: Biobank, 2002

Agritourism (data not shown) is a characteristic feature of the Italian countryside and it has also experienced a huge development in the last years. On the organic farms, it allows not only to diversify income sources, but also to sell farm products and to educate the guests about the benefits of organic foods, once back home. In 2000, the number of organic farms was up to 595 all over the country, decreasing next year to 471 (-20%). Almost half of them can be found in the four Regions of Central Italy, with Tuscany in leading position.

3. Processing

The expansion of agricultural production has been accompanied by a similar trend in the number of processing units (Table 4), whose total consistency has increased in only three years by 142%. At present, there are about 3,000 non agricultural processing units and almost 1,300 producers with processing activities on the farms. Traditionally, as in conventional food chain, most processing was concentrated in the upper part of the Country, but this scenario is slowly changing.

Table 4 - Processors, by Region.

Region	Farms with processing (no.)				Processing firms (no.)				Total				%	Growth %
	1997	1998	1999	2000	1997	1998	1999	2000	1997	1998	1999	2000		
Piemonte	51	47	52	64	91	122	153	229	142	169	205	293	7.0	106.3
Valle d'Aosta	0	0	1	2	0	0	0	0	0	0	1	2	0.0	
Liguria	11	12	12	38	16	23	26	48	27	35	38	86	2.1	218.5
Lombardia	33	31	37	79	80	130	194	299	113	161	231	378	9.0	234.5
Trentino-Alto Adige	6	12	32	27	27	51	55	96	33	0.8	87	123	2.9	272.7
Veneto	59	82	72	86	98	149	196	280	157	231	268	366	8.7	133.1
Friuli Venezia Giulia	12	18	20	23	16	15	23	34	28	33	43	57	1.4	103.6
Emilia Romagna	51	52	58	71	181	232	311	441	232	284	369	512	12.2	120.7
North	**223**	**254**	**284**	**390**	**509**	**722**	**958**	**1,427**	**732**	**976**	**1,242**	**1,817**	**43.3**	**148.2**
Toscana	111	101	110	146	71	108	128	226	182	209	238	372	8.9	104.4
Marche	34	37	40	49	25	41	58	82	59	78	98	131	3.1	122.0
Umbria	33	17	63	83	18	35	55	79	51	52	118	162	3.9	217.6
Lazio	190	69	61	73	44	59	89	152	234	128	150	225	5.4	-3.8
Centre	**368**	**224**	**274**	**351**	**158**	**243**	**330**	**539**	**526**	**467**	**604**	**890**	**21.2**	**69.2**
Abruzzo	26	23	42	42	24	33	44	83	50	56	86	125	3.0	150.0
Molise	6	7	7	6	11	13	19	23	17	20	26	29	0.7	70.6
Campania	19	35	39	51	30	62	83	110	49	97	122	161	3.8	228.6
Puglia	42	47	71	117	47	68	152	263	89	115	223	380	9.1	327.0
Basilicata	9	8	8	18	6	7	12	21	15	15	20	39	0.9	160.0
Calabria	49	89	86	105	26	37	60	86	75	126	146	191	4.6	154.7
South	**151**	**209**	**253**	**339**	**144**	**220**	**370**	**586**	**295**	**429**	**623**	**925**	**22.1**	**213.6**
Sicilia	43	27	66	106	86	149	199	292	129	176	265	398	9.5	208.5
Sardegna	35	21	95	111	11	16	37	54	46	37	132	165	3.9	258.7
Islands	**78**	**48**	**161**	**217**	**97**	**165**	**236**	**346**	**175**	**213**	**397**	**563**	**13.4**	**221.7**
ITALIA	**820**	**735**	**972**	**1,297**	**908**	**1,350**	**1,894**	**2,898**	**1,728**	**2,085**	**2,866**	**4,195**	**100.0**	**142.8**

Source: Elaboration on Bio Bank data.

The Northern Regions still have 45% of farms with processing facilities and 56% of the organic food firms, while Southern Italy + Islands have 28% and 27% but all these Regions are showing a very rapid positive evolution. The number of agricultural entrepreneurs who are moving into processing is astonishing: +125% in the Southern regions and +178% in the Islands. The same can be said for the off farm processing, which has grown in two years by 307% in the South and by 257% in Sardegna and Sicilia. Organic farming (as well as the so called typical products[4]) is inducing the setting up, conversion or expansion of new economic activities in the countryside, creating jobs and value added. Furthermore, producers are proud again of the quality of their outputs and of their role in the society.

4. Distribution

Italy represents one of the most important markets for organic foods (Michelsen et al., 1999), expanding every single year and the total sales have reached in the fiscal year 2000 about 1,174 million Euro (D'Auria and Pittiglio, 2001). The first organic shop (Il girasole – the sunflower) was established in Milan, the industrial and financial capital of Italy, in the early '70's and it was a NGO: a non profit producers' and consumers' co-operative society. For a long period organic products could be found only in a few specialised grocery stores, generally of small dimensions, most of which were run by consumers' and farmers' non profit associations or by co-operative societies. Direct sale at open market places and at farm have also remained major marketing channels until mid '90's. During the second half of the '90s, the entire organic food chain has exploded (Santucci et al. 1999, Santucci 2001): every single day a new activity begins its operation: specialised shops, supermarkets, franchisees, school canteens, etc.. For all marketing forms (Table 5), the northern Regions still represent the bigger share. In the southern part of Italy organic foods can be found in a few points, generally concentrated in the biggest and richest towns. Since 1999 all supermarket chains have entered into this niche market, all of them with their own private label (Table 6). A recent study (D'Auria and Pittiglio, 2002) reveals that in the 12 month period from November 2000 to October 2001, the sales within the supermarkets have reached 254 million Euro, a spectacular +87.8% increase, that follows a previous annual growth of 35%. The consumers' expenditures is distributed over almost all categories of products: dairy products account for 26%, fruits and vegetables 13%, baby food 9%, bread and biscuits 12%, eggs 6%. Not surprisingly, organic meat is still almost absent, because this sub-sector still needs to be properly organised. All sectors show very strong expansion: fruits and vegetables +100%, dairy products +155%, pasta and rice +155% and so on.

[4] Consumers all over Europe are re-descovering the pleasure of eating and drinking typical products.
The European Union, with two Regulations (2081/92 and 2082/92) has established the much needed legislative framework.

Table 5 - Marketing channels in 2001, by Region.

Regions	Italian population	Organic shops		Organic markets		School canteens		Restaurants		Supermarkets		Total		Density*
		no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	
Piemonte	4,166,442	125	12.0	21	14.7	20	5.8	10	7.1	165	11.5	341	11.0	12,218
Valle d'Aosta	119,356	7	0.7	0	0.0	1	0.3	0	0.0	4	0.3	12	0.4	9,946
Liguria	1,560,748	40	3.9	6	4.2	12	3.5	7	5.0	60	4.2	125	4.0	12,486
Lombardia	8,922,463	178	17.1	31	21.7	44	12.9	21	14.9	322	22.4	596	19.2	14,971
Trentino-Alto Adige	937,107	52	5.0	4	2.8	10	2.9	4	2.8	56	3.9	126	4.1	7,437
Veneto	4,490,586	132	12.7	18	12.6	43	12.6	6	4.3	141	9.8	340	11.0	13,208
Friuli Venezia Giulia	1,180,375	48	4.6	6	4.2	32	9.4	4	2.8	44	3.1	134	4.3	8,809
Emilia Romagna	3,960,549	108	10.4	16	11.2	90	26.3	22	15.6	213	14.8	449	14.5	8,821
North	25,337,626	**690**	**66.5**	**102**	**71.3**	**252**	**73.7**	**74**	**52.5**	**1,005**	**69.8**	**2,123**	**68.4**	**11,935**
Toscana	3,460,835	96	9.2	21	14.7	38	11.1	18	12.8	146	10.1	319	10.3	10,849
Marche	1463868	34	3.3	5	3.5	11	3.2	22	15.6	19	1.3	91	2.9	16,086
Umbria	815,588	11	1.1	2	1.4	4	1.2	5	3.5	44	3.1	66	2.1	12,357
Lazio	4,976,184	88	8.5	4	2.8	14	4.1	10	7.1	106	7.4	222	7.2	22,415
Centre	10,716,475	**229**	**22.1**	**32**	**22.4**	**67**	**19.6**	**55**	**39.0**	**315**	**21.9**	**698**	**22.5**	**15,353**
Abruzzo	1,244,226	6	0.6	1	0.7	4	1.2	2	1.4	40	2.8	53	1.7	23,476
Molise	316,548	3	0.3	1	0.7	1	0.3	0	0.0	5	0.3	10	0.3	31,655
Campania	5,652,492	33	3.2	0	0.0	2	0.6	5	3.5	14	1.0	54	1.7	104,676
Puglia	3,983,487	34	3.3	0	0.0	3	0.9	1	0.7	8	0.6	46	1.5	86,598
Basilicata	595,727	2	0.2	0	0.0	5	1.5	0	0.0	0	0.0	7	0.2	85,104
Calabria	1,993,274	6	0.6	0	0.0	1	0.3	2	1.4	0	0.0	9	0.3	221,475
South	13,785,754	**84**	**8.1**	**2**	**1.4**	**16**	**4.7**	**10**	**7.1**	**67**	**4.7**	**179**	**5.8**	**77,015**
Sicilia	4,866,202	26	2.5	3	2.1	2	0.6	2	1.4	48	3.3	81	2.6	60,077
Sardegna	1,599,511	9	0.9	4	2.8	5	1.5	0	0.0	4	0.3	22	0.7	72,705
Islands	6,465,713	**35**	**3.4**	**7**	**4.9**	**7**	**2.0**	**2**	**1.4**	**52**	**3.6**	**103**	**3.3**	**62,774**
ITALIA	**56,305,568**	**1,038**	**100.0**	**143**	**100.0**	**342**	**100.0**	**141**	**100.0**	**1,439**	**100.0**	**3,103**	**100.0**	**18,146**

Source: Elaboration on Bio Bank data. Density = Person/total number of places selling organic products.

Table 6 - Presence of organic foods in supermarkets

Chain	Private label	Launch
Coop - ipercoop	Naturali biologici	Nov 1995
Billa - Standa	Sì, naturalmente	Jun 1998
Pam	Pam da agricoltura biologica	Aug 1999
Panorama	Panorama da agricoltura biologica	Aug 1999
Superal	Superal da agricoltura biologica	Aug 1999
Famila	Biologico	Sep 1999
Esselunga	Esselunga Bio	Nov 1999
Gigante	Linea Biologica - Gusto Natura	Feb 2000
GS - Euromercato	Scelgo Bio	May 2000
Coop - ipercoop	Coop da agricoltura biologica	Nov 2000
Conad - Margherita Pianeta	Conad Nuovi Prodotti da AB	Nov 2000
Natura Sì	NaturaSì il Supermercato della Natura	Jan 2001
Despar - Eurospar - Interspar	Bio, Logico	Feb 2001
Selex	Bio Selex	May 2001
Crai	Crai Bio	Jul 2001

Box schemes were never very common, with the exception of some notable case, for vegetables or meat. Some catalogues for mail orders are circulating, while Internet is becoming an interesting tool, used by both intermediaries and final producers.

Another interesting development is represented by community catering: a growing number of kindergartens, school and university canteens (Santucci 2002), restaurants and even factory canteens are introducing organic menu and obviously they need a properly organized supply of ingredients, at a reasonable price.

This continuous search for higher quantities, good quality and lower prices are leading to commercial agreements, acquisitions and fusions, with somebody looking at these facts with suspicion. The challenge ahead is to organize the supply chain more and better, in order to benefit the consumers, without hurting the interests of the Italian organic farmers. If prices begin a decreasing spiral, the social sustainability of organic farming could be at risk, with negative consequences for the environment and the whole Society.

Since the very beginning, local fairs and markets have been an important trading place, specially for small producers (Santucci 1999). Many national and local level markets are held in all Regions, generally open air, from June to October. In some towns the market is held monthly or weekly, often associated to the traditional town or neighbourhood markets. The largest commercial fair (SANA).is held indoor in Bologna in September and from a few years it is also replicated in Rome in March.

Table 7 - Consumers of organic foods.

	Gregori & Moretti	Gios & Boatto	Santucci	Percivalle & Beltramo	Torelli	Columba	Antonelli	Marchini & Paoletti	Antonelli & Fersino	Murasecco
Year	1990	1990	1991	1993	1995	1995	1995	1999	1999	1999
Area	Veneto	Veneto	Perugia	Piemonte	Nord	Sicilia	Central Italy	Umbria	Puglie	Perugia
Contacted persons (no.)	158	530	50	192	100	196	240	123	555	100
Perceived premium prices	30%	30%		30%		28%				
Class of income										
- low			**					*		*
- medium	*	**	**	**	***			***		**
- high	***	***	*	***	***	***		*		*
Age (years)	40	n.d.	35	30-50	25-45			40	young	37
Formal education										
- low			6%	42%			3%	4%	28%	20%
- medium - high			26%	53%	50%		70%	60%	50%	47%
- university degree	>50%	>50%	48%	5%	50%	>50%	27%	36%	22%	33%
Motivations										
- Health	81%	66%		35%	38%	56%	86%	10%		
- Nutrition	14%	3%		5%		23%	35%	35%		
- Taste	3%	3%		10%			24%	35%		
- Environment				50%	32%					
- Other		28% nor			30% nor	21%	9%	20%		

nor= trust in norms

5. Consumers

Several investigations have been carried out, in different parts of the Country, in order to define purchasing behaviour, socio-economic profiles, motivations and expectations of the Italian consumers of organic products. Table 7 summarizes the most relevant information derived from some of these studies, which were realized with different methodologies. It appears clear that in Italy, as in other European countries, the consumers are relatively young, have a medium – high level of formal education, belong to the upper classes of income. They are conscious to pay a premium price, which is partially justified by health related justifications. Environment – linked motivations were not quoted very often. As it can be seen in Table 8, almost all the most cited motivations found in a recent survey relate to health and better nourishment.

Table 8 - Consumers' motivations (%)

Motivations	Usual consumers	Occasional consumers
For the health of myself and of my family	100,0	94,9
Because there are no toxic residues	100,0	94,5
Because I want to consume in a conscious way	98,1	87,9
Because organic foods are healthier	96,2	93,3
Because organic foods are less polluting	71,2	65,7
Because they have a better taste	51,9	50,0
For my children	49,0	52,3
Beccause they nourish better	34,6	33,7
Because I want to feel good with other people	25,0	27,3
Because they have a better look	7,7	10,3

Source: Zanoli, personal communication

Like the farmers, also consumers' profile has varied greatly along the last years: the very first consumers liked to shop frequently at the specialized organic store, which also served as a meeting point - a sort of cultural centre -, whereas the present consumers want to buy organic at the supermarkets, shop once a week, and are even willing to purchase products, like organic frozen pizza, that first time consumers would have rejected as junk food..!!!

A final interesting consideration is that the specialised organic shop nowadays is often the only retailer left in the neighbourhood and in these cases it has became the "*magasin de proximité*", the neighbourhood shop, where even people who do not know about organic agriculture, totally unmotivated, go to buy food.

6. Legislation and economic support

Undoubtedly, good part of the expansion of the organic sector in Italy has been pushed by EU legislation (Le Goullou and Sharrpé 2001): first the EU Regulation 2092/91 which defined organic farming, then the EU Reg. 2078/92 providing subsidies decoupled from output and given to the area, then the EU Reg. 1904/99, which provides some guidance for the animal productions. Subsidies have been confirmed by Reg. 1257/99 (European Commission 2001) and they may vary, according with national and local legislation. The highest subsidy goes to orchards (900 euro as upper limit) and annual crops (600) while the lowest (450) goes to pastures and fodder crops

In Italy, agricultural policy has been devoluted to Regional Governments since 1972 and this has determined a notable heterogeneity in the implementation of the EU Regulation 2078. Criteria for eligibility are different, as well as the level of subsidies for the different crops. Such differences have been used to explain the non homogeneous behaviour of farmers in the many Italian Regions, (Zanoli, 2002) and within the same Region for the different farming systems (Santucci, 1998; Cicia, Cembalo and D'Ercole, 2000).

Another explanation for different level of development of the organic food chain can be found in the extreme variety of supports which have been given to the different actors under other EU or local funds and by an endless number of Authorities. In a few Regions, organic farmers are the first receivers of all type of grants and agricultural credit, for any investments, whereas in other Regions they only receive some more scores and gain some position in the applicants' list. In other Regions, local and provincial Governments facilitate with personnel and structures the organisation of weekly and monthly open markets. EU social funds have been used for a long list of training activities (see next paragraph) unevenly distributed. Educational campaign towards school teachers, parents and medical doctors have been organised by the Health Department of some Regions, consequently leading to a growing demand for locally produced organic foods. Several LEADER projects all over the Country, but not everywhere, strongly supported organic farming, with applied experimental activities, finalized extension, grants for small scale processing plants, even for specialised organic grocery shops. Many Municipalities, as written before, have financially supported the introduction of organic ingredients into the menu composition of schools and other communities. Still, it must be clear to the Reader, that the financial support provided to organic food chain is nothing, whenever compared with the flow of direct and indirect support that has been given and still is given to conventional food chains.

7. Certification

At present, nine Certification bodies operate nationwide in Italy (Table 9). Some of them were initially cultural associations, as the Biodynamic Association (est. 1947), Suolo e Salute (Soil and Health est.1969) and AIAB (Associazione Italiana per l'Agricoltura Biologica, est. 1988), linking producers, scientists, consumers, etc.. aiming at the development of organic farming. They organised conferences and training courses, published magazines and lobbied for recognition of organic farming. CCPB (Consorzio per il Controllo dei Prodotti Biologici) was established in 1988 by some major cooperative societies, mainly operating in the north-eastern part of the Country, which where beginning to be interested in organic productions. In 1993, the Italian Minister of Agriculture recognized three new organisations (A.M.A.B. = Associazione Marchigiana per l`Agricoltura Biologica, AgriEcoBio and BioAgriCoop) bringing the total number of certifying bodies up to seven. In the German speaking Province of Sud Tirol, at the border with Austria, the German Certification Bodies Biozert and IMO are authorized to operate.

Table 9 - Certification Bodies, December 31, 2000

Certification Body	Established Year	Farms		Hectares	
		no.	%	no.	%
AIAB (now ICEA)	1988	13.607	24,0	306.891	28,6
Bioagricoop	1984	8.332	14,7	192.312	17,9
Bios	1996	2.098	3,7	23.300	2,2
CCPB	1988	4.418	7,8	69.953	6,5
Codex (formerly Demeter)	1995	1.614	2,8	21.911	2,0
Ecocert Italia	1992	5.779	10,2	78.394	7,3
IMC (formerly AMAB)	1995	5.428	9,6	89.010	8,3
QC&I	1992	3.987	7,0	123.012	11,5
Suolo e Salute	1969	11.518	20,3	169.320	15,8
Total		56.781	100,0	1.074.103	100,0

Source: Biobank

In March 1995, the Decree 220/95 confirmed the mentioned Certification Bodies, but later on, on December 1996, the Ministry of Agriculture did not reconfirm AgriEcoBio, because it did not conform to EN 45011 standards. In that year three new bodies (QC&I, Bios and Ecocert), were recognised and registered. More recently, in order to have certification made by a Third Party, AMAB, the Biodynamic Association and AIAB withdrew from certification and set up separate Bodies, respectively IMC (est. 1995), CODEX (1995) and ICEA (2002). At present, six of these Certification Bodies are also accredited by Sincert, according to EU Reg. 1935/95, that applies in Europe the norm UNI-EN 45011. Three are also accredited with IFOAM.

AIAB-ICEA is the largest Certification Body and probably the best known association at national and international level. It certifies about 24% of farms and 29% of the organic area (Table 9). Suolo e Salute is the runner up, with respectively 20% and 16%. The third biggest Certification Body is Bioagricoop, with 15% of farms and 18% of surface.

The Biodynamic Association and AMAB still pursue stricter production codes than those established by the EU regulations and therefore farmers respecting these guidelines can even put these labels on their products.

Altogether, these nine Certification Bodies dispose of about 90 local offices, staffed with 1,000 agronomists and other technicians, properly trained (Santucci, 1999), who are responsible for inspecting the farms, the processing plants, the storage facilities, in order to verify the respect of the EU Regulations and of the Production norms established by the various associations, for products not covered by the EU legislation.

The coexistence of so many Certification Bodies and labels, like in many other European Countries, is generating some confusion among consumers and this can explain why supermarket chains have decided to use their own private label, in an effort to assure their clients about the quality of the controls. Obviously the private label *per se* is not enough and all products must be certified by one of the Certification Bodies.

8. Research and extension

Until mid '90s, there practically there was no formal research about organic farming, with some notable exceptions, like in the field of agricultural economics or for what concerns integrated pest management. Organic farmers and the few agronomists working with them were elaborating their own innovations, which were then diffused through informal channels and some alternative journals (Santucci 1993, Santucci 1995).

More recently, the pressure for research in organic agriculture has been growing up and also Institutions like Universities and Public Research Centres are opening up to new fields of investigations. Unfortunately, the level of funding for these activities, also in conventional farming, is dramatically low and consequently the resources for a proper research programme for organic farming, at national level, never materialized.. Recent surveys made by CEDAS, a Documentation Centre for Sustainable Agriculture, have shown that an increasing number of researchers are currently working on organic farming systems. Funds are provided by the National Research Council, by the Ministry of Agriculture, by the Regional Governments or by the European Union, but their total entity, although rising, is still extremely low.

The National Institute of Statistics (ISTAT) has introduced some questions about OF in the latest version of the Census Form and a working group was established to propose further investigation. The National Institute of Agricultural Economics (INEA) since 1997 devotes a special chapter of its Yearbook to Organic Farming. INEA has also increased the number of organic farms surveyed by the EU supported Farm Accounting Data Network.

The same can be said for the extension activities: until early '90s, the number of agronomists or veterinarians who could support farmers interested in organic farming was negligible and information was spread by the early adopters almost mouth to mouth. After the EU regulation, a frantic training activity for new extension agents (and for inspectors) has taken place, in all regions (see next paragraph). Still, the number of properly trained advisors is far from the needed amount and most extension activities only motivate the farmers towards organic farming (and towards the subsidies).

An interesting development occurred in last two years is the growing attention paid by private Publishing Houses to organic farming: a growing number of books and booklets, either translated from other languages or written by Italian experts is now available and all agricultural magazines have articles about this subject. The biggest Agricultural Magazine has begun the publication of a monthly magazine, totally devoted to organic farming.

Insufficient research, education and extension may severely limit the sustainable development of the sector (Micheloni and Zanoli 1999). Some peculiarity of the Mediterranean farming systems, like the higher difficulties experienced by organic fruit and vegetables growers compared to those encountered by arable and livestock farmers, the problems of stockless horticultural and arable farming due to the structural characters of the Italian agricultural systems are issued that need to be tackled urgently in co-operation with farmers and their associations. The pressure on prices already experienced for some commodities (cereals, for example) will require to improve the efficiency of the organic production systems.

9. Education and training

Formal education on organic farming has begun to appear in some Technical College for Agriculture (age of students 14-18) only recently and the same can be said for Vocational Schools of Agriculture (same age, two cycles of three and two years, respectively). At University level, organic farming has encountered enormous difficulties and only recently some Faculties have stepped into this subject, generally to meet the enormous demand from the new generations of students. The Ministry of Agriculture has officially started a National School of Organic Farming, and some short courses (one or two weeks) were already organised for employees of the Public Sector and of the Farmers' Unions, aiming at providing the personnel of these Agencies with a common knowledge, either technical and administrative. .

Vocational training is a matter devoluted to the Regional Governments since 1972 and the various Administrations have responded differently to the needs for appropriate training expressed by the labour market. Santucci (1993) found almost ten years ago that training for farmers and technical staff operating in various Entities was extremely heterogeneous. The same pattern has continued to the present.

Two years ago, the Agronomic Mediterranean Institute of Bari, a renown international research and education Institution, operating within the umbrella of CIEHAM, launched its first Master Course on Mediterranean Organic Agriculture, taught in English, open to students from all Mediterranean Countries. Lecturers have been selected from all Mediterranean and European Countries.

10. References

Cicia G., Cembalo L., D'Ercole E. (2000) EU policy for agro-chemical inputs use reduction: a comparison of current and potential policies in a rural area of Southern Italy, paper for 6th Biannual Meeting of the Society for Ecological Economics, Luglio, Canberra (Australia).

D'Auria R., Pittiglio L. (2001) La spesa alimentare di prodotti biologici, mimeo, ISMEA, Roma.

D'Auria R., Pittiglio L. (2002) La spesa domestica per i prodotti biologici confezionati, mimeo, ISMEA, Roma.

European Commission (2001) Organic farming in the EU: facts and figures, mimeo, Bruxelles.

Le Guilllou G., Sharpé A. (2001) Organic Farming, guide to Community rules, European Commission, Bruxelles.

Micheloni C., Zanoli R. (1999) The state-of-the-art of Research on Organic Farming in Mediterranean EU Countries, in Zanoli R., Krell R. (a cura di) Proceedings of the 1st SREN Workshop on "Research Methodologies in Organic Farming", REU – Technical Series 58, FAO, Roma.

Michelsen J. et al. (1999) The European market for organic products: growth and development, Universitaet Hohenheim, Hohenheim.

Santucci F.M. (1993) Back to the future: giving advice on organic farming, Proceedings of the 11th ESEE, Ahrus.

Santucci F.M. (1995) In the farmers' hands, in "Extension at the cross-roads", Ziti Publ. Company, Thessaloniki, 1995.

Santucci F.M. (1999) Alla scoperta dei mercatini biologici, Edizioni Distilleria, Forli.

Santucci F.M. (1999) Training and information needs of inspectors operating in organic farming in Italy, in Proceedings of 14th ESEE, Krakow.

Santucci F.M. (2001) Marketing behaviour of organic farmers, MEDIT, 3.

Santucci F.M. et al. (1999) The marketing of organic food in Italy, MEDIT, 4.

Zanoli R. (2001) Italy, in World markets for organic fruit and vegetables, FAO/ITC/CTA, Roma.

Zanoli R. (2002) L`agricoltura biologica in Italia, in AGER, Innovazione e ambiente. Figure professionali e fabbisogni formativi per l`agricoltura biologica, Ministero del Lavoro, Roma.

*****

More information about organic farming in Italy can be found at the web sites:

www.biobank.it

www.iamb.it

*****