

# Attitudes of organic farmers about information and continuing education

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## 1. Foreword

Italy is at present the European Country with the largest area converted to organic farming. The most recent unofficial figures reveal that on December 2000, 47,357 farms over almost 1,070,000 hectares respected the norms imposed by the EU Regulation 2092/91 (Biobank 2002).

This massive change, largely due to market opportunities and to EU subsidies, has been favoured and accompanied by a huge educational effort, that was implemented by a variety of actors: organic farmers' associations, farmers' unions, some universities and regional research centres, private training centres, and so on (Santucci, 1993). On the other hand, the quality of these educational activities (in organic farming like in conventional farming) was never properly investigated.

There are at least two interesting aspects to be analysed: which training is most appropriate (contents and typology of educational activity) for organic farmers, and who should bear the cost of such education (farmers, consumers or the State).

The first aspect has already been covered by several contributions (Crowder, 1996; FAO, 1993; Mougenot, 1995; Rowe, 1994). The second aspect is a major concern, taking into account the decrease of public funds for services, that is occurring in both developed and developing e-

## Abstract

During 1999, 884 organic farmers were interviewed all over Italy, in order to assess their professional behaviour and their attitudes towards information and continuing education. This research has explored the educational profiles of farmers and their openness to advice and information. It was found that organic farmers have better educational level than the average Italian farmers and that there is a strong connection between education and job satisfaction. Organic producers receive most information from the advisors paid by the conventional Unions, but they also rely on the advice from more experienced organic farmers. 55% feels the need for a specialised technical magazine and 77% requires technical meetings. Only 12% believe that training is useless, whereas the other respondents propose a variety of training approaches, from one-day full immersion into one topic to long lasting integrated courses, with meetings spread all over the growing season. 36% of organic farmers are willing to pay to attend a training course. This availability is linked with younger age, education, job satisfaction and perceived economic situation.

## Résumé

*En 1999, 884 agriculteurs biologiques ont été interviewés partout en Italie, pour analyser leur comportement professionnel et leurs attitudes à l'égard de l'information et de l'éducation en continu.*

*Cette recherche a évalué le profil éducatif des agriculteurs et leur ouverture au conseil et à l'information. On a donc constaté qu'en Italie les agriculteurs bio ont un niveau d'éducation plus élevé que l'agriculteur moyen et qu'il y a une forte connexion entre éducation et satisfaction professionnelle. Les producteurs bio reçoivent la majorité des informations par les consultants des Syndicats conventionnels, mais ils s'appuient aussi sur les conseils fournis par les agriculteurs bio qui ont une plus longue expérience. 55% d'entre eux expriment l'exigence d'avoir une revue technique spécialisée et 77% demandent plus de rencontres techniques. 12% seulement estiment que la formation est inutile, tandis que les autres proposent une variété d'approches à la formation : de la formation intensive d'une seule journée sur un sujet spécifique aux cours intégrés de longue durée, avec des séances distribuées pendant toute la saison agricole. 36% des agriculteurs bio déclarent leur disponibilité à engager une partie des frais du cours. Cette disponibilité est liée à une âge plus jeune, à l'éducation, à la satisfaction professionnelle et à la perception positive de sa propre situation économique.*

conomies (Le Guis, 1991; Rivera, 1991; Zijp, 1996).

As a matter of fact, the Italian active population in agriculture is not very educated: according to the 1991 Census, less than 10% had High School or University degree, with the most represented category being the farmers holding only the primary school certificate (five years) achieved several decades ago. Most vocational education for adult farmers is supported by State and Regional funds, generally co-provided by the European Social Fund or by other structural Funds. Farmers are not used to pay to attend training courses. They even receive some money, to cover travel costs and to stimulate attendance.

Distortions caused by absence of payments are well known: lack of commitment, poor quality of teachers and training fa-

cilities, low level of education provided, etc. A growing number of people (teachers, scientists, local administrators and even farmers) think that a participation fee should be introduced, in order not only to cover a share of the budget, but mainly to improve the quality of continuing education.

## 2. Materials and method

A direct survey was conducted in the second half of 1999, with a structured questionnaire, containing 72 closed questions. The questions cover several characteristics of the farm and of the farmers' behaviour, with a main emphasis on education, training and advice.

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Tab. 1 Structure of the sample

Region	Sample		Italy	
	no.	%	no.	%
Valle d'Aosta	1	0,1	5	0,0
Piemonte	30	3,4	1.455	4,7
Lombardia	18	2	618	2,0
Trentino	10	1,1	208	0,7
FriuliVenezia Giulia	15	1,7	151	0,5
Veneto	21	2,4	844	2,7
Liguria	6	0,7	133	0,4
Emilia Romagna	73	8,3	2.239	7,3
North	174	19,7	5.653	18,4
Toscana	27	3,1	828	2,7
Marche	43	4,9	1.298	4,2
Umbria	14	1,6	412	1,3
Lazio	36	4,1	1.629	5,3
Centre	120	13,7	4.167	13,6
Abruzzo	11	1,2	447	1,5
Molise	10	1,1	280	0,9
Campania	29	3,3	596	1,9
Puglia	90	10,2	4.264	13,9
Basilicata	15	1,7	176	0,6
Calabria	52	5,9	1.764	5,7
South	207	23,4	7.527	24,5
Sicilia	283	32	8.433	27,5
Sardegna	100	11,3	4.941	16,1
Islands	383	43,3	13.374	43,5
Total	884	100	30.721	100,0

The distribution of the 884 interviewed farmers is shown in Table 1 and it respects the organic farms' regional distribution at the end of 1998. Farmers were selected randomly from the lists of applicants for the Reg. 2078/92 subsidies and were interviewed by properly trained personnel. All answers were inserted into a database and then processed with SPSS98.2.

For this paper, only a small selection of variables is treated, having chosen only those with a closer relationship with education, information and willingness to pay.

### 3. Main findings

Most organic farms are family run, as it is the norm in Italy, and they are now mostly located on hills and flatlands. Compared to some years ago, when the early adopters were concentrated on the least polluted mountains, this shift towards more fertile and productive soils appears quite relevant.

The number of pioneers is obviously quite limited, since only 3.7% have more than ten year experience. Most of present organic farmers have approached this new method of production only recently, when EU regulations 2092/91 and 2078/92 have ensured a clear legislation and subsidies were guaranteed to converting farmers. Italians now represent 99% of the sample, whereas in the past the relative weight of foreigners was always higher. Organic farming attracts the younger generations; age distri-

bution is quite good, because almost 35% are below 40 years. Another positive aspect is represented by the level of formal education of the interviewed farm holders: 10% have a high school certificate in agriculture and 3% hold a University Degree in agriculture. Almost 20% of organic farmers have previous different working experiences, ranging from blue collars jobs to managerial positions in big companies.

Farms' average total size is about 26 hectares, out of which 17 (as average) are managed organically. Size obviously varies very much, according to geographical position and productive orientation. Farms with cereals and mixed farming average respectively 46 and 30 hectares, whereas the smallest units belong to "citrus production" (10 ha) and viticulture (11 ha).

Organic production coexists with the conventional one in most farms and a rough comparison, based on aggregated information provided by the farmers themselves, allows to say that only citrus growers and wine producers have made a clear shift: almost 100% of their income comes from organic output. In the other categories, the organic share declines, with a minimum for the few farms with animal productions, where these latter ones had to be sold as conventional. Cattle is recorded in 23% of cases, with a relative presence similar to "small animals" (25%); sheep are less frequent (15,9%), as well as pigs (11.5%) and goats (3.5%).

Cottage industries are relatively frequent. These (generally small) producers are aware that more job opportunities and better income to family members can be achieved through proper product development: wine and spirits cellars, packaging plants, cheese making, marmalades, sauces, bread and cake making, etc. Many different experiences, very heterogeneous, with marketing projections are very extreme: from a small number of friends to exports towards Japan.

Another source of income is represented by on-farm tourism, counted in 6.3% of the observations. Like in another more limited survey (Foglia, 2000) several different options have been found: bed & breakfast, full pension, restaurants, plus a variety of other activities (from horse riding to shiatsu massages), that reflect the heterogeneous background of our organic farmers.

When the respondents decided to begin the conversion from conventional to organic, they had a very active behaviour, searching for advice almost in every place. The initial sources of information were other farmers, the organic associations, public advisors, the advisors employed by the farmers' unions, etc.. There is no meaningful difference between the different sources and the only comment could be about the farmers in southern mainland, who appear to be a bit less open to external sources of information than the producers working in the other parts of the Country.

Only 13% of the interviewed persons have attended a

formal training course about organic farming, organised by very different institutions and with very different length. Other farmers had knowledge about such courses, but they had attended none. All were asked about the quality of such formal courses, basing their answer on their own experience or on what they had been told by

other people. According to their declarations, very few training activities can be rated very good and most were considered of medium quality. As a matter of fact, all courses, provided by several different Organisations, receive a neutral opinion, neither very good nor very bad. It seems that the best courses were those organised in Southern Italy by the Unions or by the Certification Bodies or the Organic Farmers' associations, while the worst training had been organised by the Universities in Central Italy.

At present, organic farmers rely very heavily on the advice provided by the advisors employed by the Unions (Table 2): they are quoted by 82% of the respondents, with a relatively high frequency. The salaries and most operating expenses of these advisors are generally covered by the Regional Governments and their advice is free of charge. However, anytime the farmers need to be helped for some paperwork, a fee is charged, that is cashed in by the Unions. Since a high share of the income is due to EU subsidies paid after very complicated applications, the Unions' advisors represent a vital actor in the life of the average farmer. Other organic farmers are the second most important source of information, quoted by 74% of the respondents, who consult them less frequently.

It is interesting (and disappointing) to see that the formal sources of innovations (Regional Research Centres, Universities and State Experimental Stations) are almost ignored by the farmers. This can be partially explained with the natural behaviour of many farmers (also conventional ones), who never enter the gate of the research centres,

Tab. 2 Present information sources about organic farming (%)

Information sources	Use %	Frequency (%)			Score (*)
		High	Medium	Low	
Farmers' Union advisors	81,8	13,7	63,6	22,7	2.039
Individual organic farmers	73,8	7,8	43,8	48,3	1.424
Certification bodies	48,0	11,8	41,5	46,7	976
Other private advisors	45,5	14,2	41,0	44,8	960
Organic farmers' associations	40,3	19,9	44,7	35,4	958
Public advisors	37,8	11,7	33,2	55,1	712
Regional Research Centres	9,7	5,8	24,4	69,8	148
Universities	4,5	12,5	25,0	62,5	80
State Experimental Stations	3,8	5,9	20,6	73,5	56

\* High = 5, medium = 3, low = 1

but it is also due to the very few research activities about Organic Farming that were developed in these places, all over Italy, until quite recently. For the main purpose of this paper, it is very relevant to note the connection between educational level and job satisfaction. The first variable includes formal education and other aspects, like attendance to courses, subscription to agricultural magazines, etc. The latter was quantified by each respondent giving a score ranging from 1 = very low, to 10 = very high. The individuals with lower educational level show also the lowest job satisfaction, whereas the persons with the best educational level are also quite happy with their profession.

Tab 3 Suggested training

Method	%
Farm visits lasting one day	73,5
Multidisciplinary meetings, over one year	62,6
Farm visits lasting several days	57,8
Short intensive course (2-3 days)	50,0
Training and work	39,6
One day course	29,2
Courses are useless	11,5

Most people (76%) affirm that they would like to participate in technical meetings for improving their knowledge, 55% feel they miss a specialised magazine and almost 50% denounce that there are no good technical books.

Only 12% believe that training is useless, whereas the other respondents propose different forms of training (Table 3). These market-oriented organic farmers do not like theory and classrooms and do not have

much time to devote to continuing education. The preferred educational method for learning new concepts and abilities is supposed to be the one day farm visit, to a good and experienced organic farmer, accompanied by the local advisor. Another option is the educational program composed by several multidisciplinary meetings, scattered all

along the year; this approach allows to cover every subject in the moment most needed, and to have practical field visits. Also very much appreciated are the farm visits lasting several days, with a group of farmers touring from

farm to farm, and visiting also processing units, experimental stations, etc.

The most important finding is that 36% of organic farmers are willing to pay (Table 4) to attend a training

Tab. 4 Economic situation and willingness to pay

Opinion about own economic status	Total no.	Total %	Willingness to pay (%)		
			No	Yes	No idea
Lower than average	128	14,7	39,1	39,1	21,9
Equal to average	585	67,0	39,1	30,6	30,3
Better than average	160	18,3	20,0	54,4	25,6
Total	873	100,0	35,6	36,2	28,2

course and this availability is positively linked with perceived economic situation, younger age, education and job satisfaction. As a matter of fact, more than 54% of those who believe to be better off than the average farmer in their area declare that they could contribute to the cost of the training, against only 39% of those who believe to have an income lower than the average.

The same happens with formal education (Table 5): 56% of the farmers with University degree declare that they could pay a fee to attend some form of further education, against a much smaller share (27%) of those who have less than eight years of school attendance.

And again, the individuals who are willing to pay for further training appear to be (as average) six years younger than those with a negative attitude, and to have a job satisfaction (7,1/10) higher than the respondents who declare not to be willing to pay (Table 6).

#### 4. Conclusions

The recent explosion of organic farming, mostly concentrated in Southern Italy and in the Islands, has attracted many conventional farmers who were looking for alternative sources of income, either as subsidies and premium prices at the market. It appears that most of them have gone (are going) through the conversion period without proper training and that they were using a variety of different sources of information.

Still, most respondents feel that there is an information gap between conventional and organic farming, due to lack of research, low number of advisors, absence of appropriate publications. The majority of farmers therefore think that they could profit from more structured learning, but they reject the traditional options of vocational education and look for more tailor-made training activities. A good share of the interviewed persons declare their willingness to pay for fruitful training and this attitude is related with younger education, better income situation and good self-esteem.

Training centres, either profit- and non-profit oriented, should therefore adapt their training activities, in order to meet the needs of farmers who can support at least a part

Education	Total		Willingness to pay (%)		
	no.	%	Yes	No	No idea
Up to 8 year schooling	526	59,8	27,2	42,6	30,2
High school	272	30,9	47,8	25,7	26,5
University degree	81	9,2	55,6	22,2	22,2
Total	879	100,0	36,2	35,5	28,3

of the cost of training, in order to reorient the decreasing resources toward the ones who can not pay.

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Tab. 6 Job satisfaction, age and willingness to pay

Willingness		Age (years)	Job satisfaction
No	Average	52,3	6,3
	s.d.	14,0	1,7
Yes	Average	46,0	7,1
	s.d.	12,1	1,6
No idea	Average	47,7	6,8
	s.d.	13,7	1,6
Total	Average	48,7	6,8
	s.d.	13,5	1,7