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Review

A plan to place successfully organic products in the Cypriot market

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This study aims to introduce a plan to place successfully organic products in the Cypriot market. In this sense, it attempts to offer more insight into Cypriot organic market. The research focused on three levels; consumers, producers and retailers of organic products in order to collect information regarding the production process of organic products, the difficulties in their disposal, the availability and quality of the organic products, their prices and the demand of organic products, as well as consumers' behaviour towards organic versus conventional grocery products. A survey that utilised a self-administered questionnaire for collecting data from respondents was conducted at various areas of Cyprus. According to the results, although the majority of consumers are aware of organic agriculture, only a few buy certified organic products. On the other hand, consumers are willing to pay higher prices to buy organic products. According to growers, market organisation is the most important weakness in the successful promotion of organic products. In addition, organic growers are reluctant to increase their production imposing that government does not support satisfactorily organic production. On the other hand, retailers argue that consumer demand, personal considerations about organic production and the fact that organics is an emerging market, could affect their decision to place more organic products in their stores. Therefore, a national plan, in order to place successfully organic products in the local market, it should incorporate all the above mentioned issues. Additionally, it should be in line with the European Action Plan for Organic Food and Farming initiated by the European Commission in 2004.

Key words: Cyprus, organic agriculture products market, national plan.

INTRODUCTION

Food quality and safety has become a priority within the food market due to fundamental changes in consumers' demands and preferences. With the globalization of food systems, consumers became estranged from the origin and the context of the food they were accustomed to consume. This led to a change in the way they view and evaluate their food (Torjusen et al., 2001). Consumers are becoming more and more concerned about the food they consume. Their concerns focus mainly on production issues such as food safety (Huang, 1995), food quality (Haglund et al., 1999), as well as health attributes (Beharrel and MacFie, 1991), the environment (Cudjoe and Rees, 1992; Haglund et al., 1999) and animal welfare (Fearne and Lavelle, 1996). Consequently, overall quality differentiation of food products has become an essential factor in satisfying consumers' needs. This has resulted to an increasing demand of differentiated food products, such as organic products. "One type of environmental but also a wider quality and health-conscious expression, is the purchase of organic products" (Fotopoulos and Krystallis, 2002).

The demand of organic food depends on several factors, such as: the environmental consciousness of the consumers, the features of organic products (e.g. appearance, colour), the impulse or consciousness way of purchase, the certification of organic products as well as the socio-economic characteristics of the consumer, e.g. age, income, education level etc. (Iakovidou and Patsalidou, 2004).

Currently in Cyprus, the market of organic products is at a premature stage due to the fact that Organic Agri-culture (OA) has only recently been introduced in Cyprus. As a result, there is insufficient knowledge about the marketing of organic products. However, with the farming. The

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international recognition of organic farming started in 1998 by the International Federation of Organic entry of Cyprus in the European Union it gained the opportunity to participate in several EU cooperation projects concerning OA, such as the project Organics, OrganicMed and most recently the Bio@gro, in which the Agricultural Research Institute was partner. The knowledge obtained through such projects will facilitate the penetration of organic products in the market more rapidly. In addition, from the year 2000 and onwards organic production went through a substantial boost, while simultaneously Cypriot consumers altered their attitudes towards the need of higher quality, healthier and more nutritious food products.

Despite the impressive increase of areas devoted to organic farming, substantial areas are in the process to convert into organic, in a few years. It is expected therefore, that both the cultivated area and the volume of organic products will increase significantly in the years ahead; a development that calls for a national Plan, which will successfully place Organic Products in Cyprus market and create export opportunities. The proposed Plan is supported by evidence which results from a relevant market research.

Market research is focused on three levels; consumers, producers and retailers of organic products. The aim of consumer research is to identify their awareness on organic products, record the trends in consumer preferences, and identify the demographics (age, sex, income, educational level, etc) and their willingness to pay for organic products. The market research on producers collects information regarding the production process, difficulties in the disposal of production and the willingness to produce more organic products. Retailers of organic products provide useful information on the availability, quality, prices and consumer demand of organic products.

SITUATION ANALYSIS

The concept of organic farming

The concept of organic farming is encompassed in the definition developed by the Codex Alimentarius, on the basis of contributions from experts from all over the world. According to the Codex, organic farming involves holistic production management systems (for crops and livestock), emphasising the use of management practices in preference to the use of off-farm inputs. This is accomplished by using, where possible, cultural, biological and mechanical methods in preference to synthetic materials.

Organic Farming was originally recognized and regulated by the European Union back in the 1990s by adopting the regulation (EEC) No. 2092/91. Regulation (EEC) No. 2078/92 provides for the support to organic Agriculture Movements (IFOAM) which set up common specifications and standard. In 1999 the Food and Agriculture Organization (FAO) also introduced an organic farming program, mainly aimed to promote organic farming in developing countries.

Organic farming in Cyprus

Organic agriculture has recently been introduced to Cyprus. As a result it's far behind compared with other European countries; Cyprus is in the third place from the bottom with only 0.65% of its area covered with organic products (Chart 1).

OA was introduced to Cyprus in 1988, when two farmers involved in the production of several kinds of vegetables such as potatoes, cereals and olive oils. During the 1990s, the number of farmers as well as the area of land under organic management increased, although at a slow rate, while new products were added to the list of organic products, including dessert grapes, carob, herbs and pulses. Up to 2000, there has been a substantial increase in organic production. With the adoption of the Rural Development Plan (2004-2006) of the Ministry of Agriculture, Natural Resources and Environment (http://www.moa.gov.cy) for the establishment of subsidization for production of organic products, along with the increasing demand from the consumers for high quality, nutriatious and healthy agricultural products, organic farming has been augmented considerably. Figures 1 and 2 illustrate the development of organic farming in Cyprus for the period 2002-2006.

Figure 3 shows analytically the of OA area (in decares) in the various areas in Cyprus for the year 2005, according to the Ministry of Agriculture, Natural Resources and Environment Concerning the trade sector, which is not very strong, there are today in Cyprus 18 processors.

Organic agriculture is regulated by the "Biological Production Law 160(J)/2001", which is completely harmonised with the corresponding Legislation of European Union (EEC) 2092/91 and (EU) 1804/99 of the Council. The body responsible for the implementation of the law is the Department of Agriculture, Ministry of Agriculture, Natural Resources and Environment (MANRE), which has also the responsibility to apply National Regulations on specific issues concerning organic agriculture. Two organizations are engaged in the certification of all those involved in Food Production (farmers, processors etc): (a) Lacon Ltd, and (b) Biocert Cyprus. In addition, research on aspects of organic farming is carried out by the Agricultural Research Institute (ARI-http://www.ari.gov.cy).

Based on previous research conducted by ARI one of the most important constraints to the development of organic agriculture in Cyprus is the limited existing knowledge and know-how on organic crop growing. On the other hand, marketing channels seem not willing or capable to market organic products (Markou and Papadavid, 2006 - unpublished work).

Following the GATT agreement (1995) and the EU accession (2004) all trade barriers have been abolished and agricultural products are freely marketed in the local market. In recent years Cyprus agriculture lost some of

APPENDIX

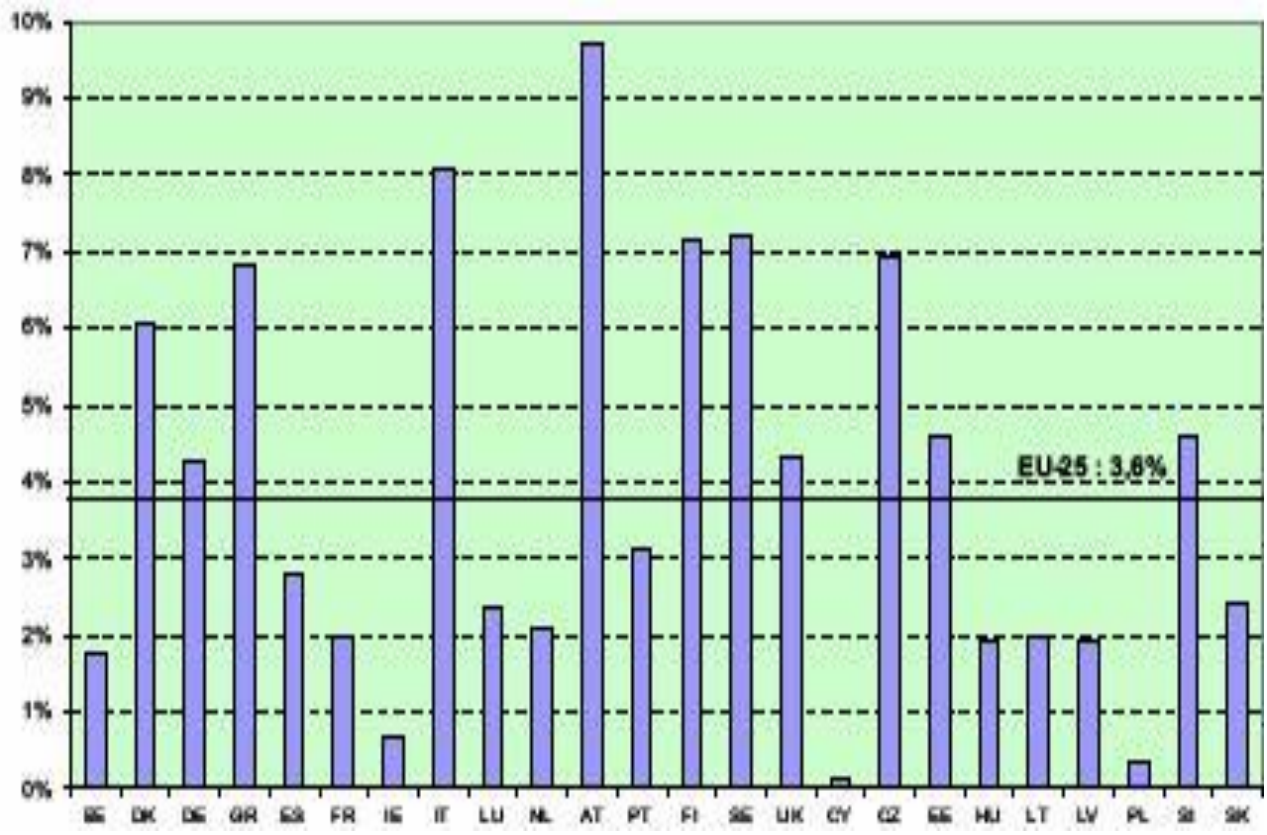

Chart 1. Organic farming in Europe (share of organic area in UAA in EU-25, 2003 (%).
Source: Organic farming in the European Union facts and figures. Commission Européenne direction générale de l'agriculture et du développement rural.

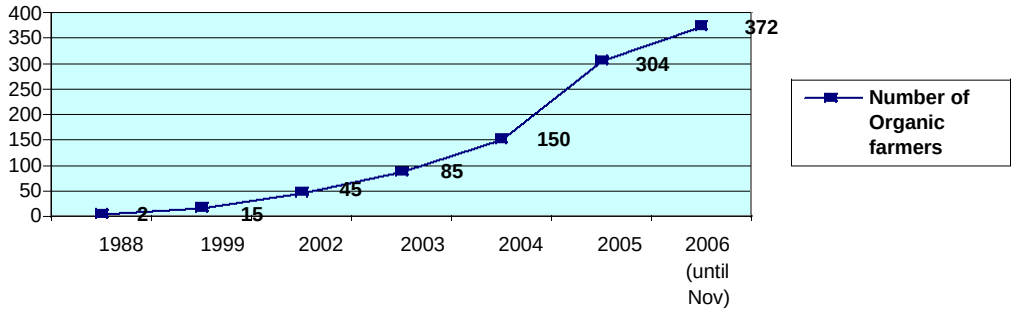

Figure 1. Number of organic farmers.

its competitiveness due to rising labour and input costs, unfavour weather conditions and stagnating prices in the exports markets. Thus there is increasing penetration of imports and competition in the local market while exports remain stable, or even decrease. It is expected that the competition will increase further in the near future, especially for the conventional agricultural products. Differentiated products, like the organics, could provide outlet and alternative source of income to those involved in their production and processing. However, in order to be a success, organic production should be supported by a relevant strategic plan which will address all weaknesses related to the production, processing and marketing of organic products.

Support to organic agriculture under the current status

Rural Development Plan (RPD) 2007-2013 is the sole document which covers all aspects of the National Agricultural Policy in Cyprus. Approximately 325 million will be provided in the six year period through various

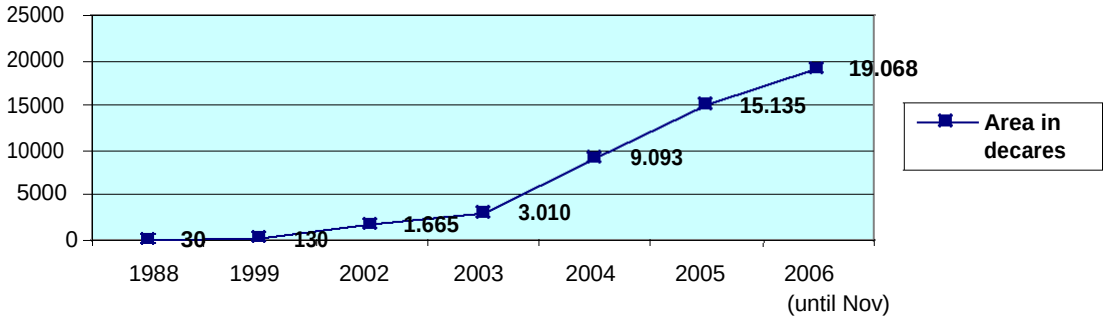

Figure 2. Area in decares.
Source: Ministry of Agriculture and Natural Resources and Environment.

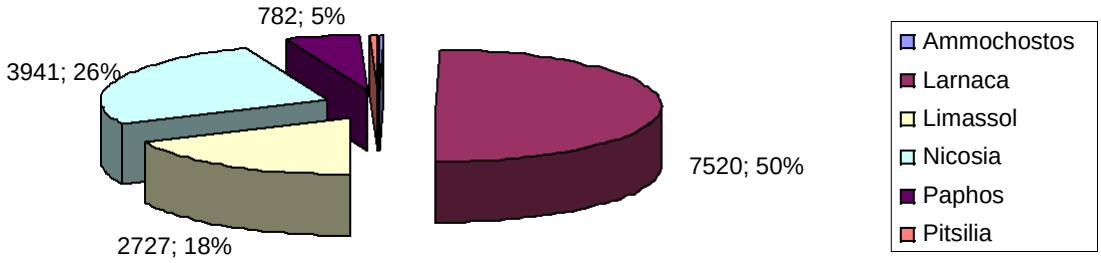

Figure 3. OA cultivated land (decares) in various regions (2005).
Source: Ministry of Agriculture and Natural Resources and Environment.

Table 1. Financial plan by axis (in EUR total period) – Rural Development Plan of Cyprus.

Title	Total Public Expenditure (1)	EAFRD Contribution Rate (%)	EAFRD Contribution
1 Improving the competitiveness of the agricultural and forestry sector	140,521,676	50	70,260,838
2 Improving the environment and the countryside	141,143,400	50	70,571,700
3 The quality of life in rural areas and diversification of the rural economy	28,929,714	50	14,464,857
4 Leader	8,626,180	50	4,313,090
5 Technical Assistance	5,826,178	50	2,913,089
Total	325,047,148	50	162,523,574

Source: European Commission Directorate – General for Agriculture and Rural Development.

support schemes as it is presented in the table to follow (Table 1).

Table 2 summarises the measures of the R.D.P., which are related to Organic production. It consists of five columns; the serial number, measure title, its objective, the beneficiaries, the rate/ amount of support as well as the total budget of the measure for the whole period (2007-2013).

RESEARCH DESIGN AND RESEARCH

RESULTS Research purpose and objectives

The aim of the research is to deliver an insight into the theme of organic products with the following specific aims:

a) Collect primary information on consumers' preferences (currently not available) concerning their perceptions in consuming organic products.
b) Estimate how consumers' preferences are affected in accordance to their demographic characteristics.
c) Record the problems associated with the production and marketing of organic products.
d) Identify the trends in production and consumption of organic products.
e) Compare the production costs and certain attributes between organic and conventional agricultural products.

Preliminary survey

A preliminary research was done before the final statement and design of the questionnaire. In this sense, the questionnaire was pre-tested with a small but represen-

tative sample of consumers, ensuring workability in terms of structure, content, flow and duration.

Primary survey

The research focused on three levels; consumers, producers and retailers of organic products. In this sense, three questionnaires (one for producers, one for retailers and one for consumers) were applied. The focus of the study was to collect information regarding the production process of organic products, the difficulties in their disposal, producers willingness to produce more organic products, the availability and quality of the organic products, their prices and the demand of organic products, as well as consumers' behaviour towards organic versus conventional grocery products.

The sample was consisted of 192 respondents; 160 consumers, 21 producers and 11 retailers of organic products. Consumers and retailers' survey were conduc-ted at the capital of Cyprus, Nicosia, while the producers' survey took place at various areas of Cyprus; within the region of Nicosia, Limassol and Larnaca.

The primary survey took place from 1st to 30th of November 2007. The method used to collect information from the respondents was the face- to-face anonymous interviews. Interviews took place on alternative days of the working week either in the morning or in the afternoon.

The questionnaires consisted of two or multiple answer questions and a few open-ended questions. The data gathered were in their majority ordinal measures (for example, strongly agree, agree, neutral) or nominal measures (for example, organic or conventional products).

The methods used for analysis were firstly the descriptive statistical analysis, since it can easily sum-marize and describe visually the sample results. The Mann-Whit-ney test (non-parametric test) was also employed to com-pare various groups of respondents. Many graphic tools such as pie or bar charts were used to illustrate the sample findings in a handy and understandable way. The data were analyzed using the SPSS and EXCEL softwares.

RESEARCH RESULTS

Consumer research results: Identity of the consumer research - Socio-demographic characteristics

The sample was consisted of 160 respondents and as it appears in the table below (Table 3), these were distinguished into three subgroups:

1. The Unaware (16 respondents); they have never heard of organic products.
2. The Aware Buyers (66 respondents); they know about organic products and they buy this kind of products.
3. The Aware Non-Buyers (78 respondents); although they are aware of organic products, they do not buy these products.

In terms of the demographic characteristics of the respondents, these are presented in the Table 3. * This result is in line with previous findings (Markou, 2003), showing that mainly Cypriot women are responsible for the shopping of their family.

A great percentage equal to 90% of the respondents seems to be aware of the term "organic products", while the rest (10%) have never heard of the term. However, when respondents were asked to provide one or more definitions related to the term, almost half of them 53% gave the one accurate definition from the given list (Table 4). Whereas, the rest of the respondents (47%) gave the accurate definition, while simultaneously related "organic products" to something close to the main idea of the organic concept. Thus, 26% of the aware subgroup related organic food to natural/ healthy food, 23% to products whose production does not cause pollution to the environment and 24% to traditional cultivated food.

The unaware consumers

In order to develop a profile of 16 respondents, who have never heard of the Organic products ("unaware subgroup"), the same socio-demographic characteristics were used (Table 5).

The Mann-Whitney test (non-parametric test) was used in order to compare the "unaware" and "aware" of organic products subgroups in terms of their age level, household size, education level and family income. The main statistically significant differences between the "unaware" and the "aware" subgroups are in terms of the education level and the family income ($p<0.05$) (Table 5). In this sense, the unaware consumers exhibit much lower education level and their monthly family income was much lower compared to the income of the aware consumers.

The aware non buyers of organic grocery products

With the use of the 3rd question of the questionnaire, we manage to distinguish between the aware non buyers of organic products and aware buyers subgroups. Thus, 78% of the sample, although they are aware of the Organic products, they have never purchased such products. The socio-demographic characteristics used previously, were selected in order to compare the buyers and non-buyers subgroups (Table 6).

According to the Mann-Whitney test, the main statistically significant difference ($p<0.05$) between the buyers and non-buyers subgroups is that of the age (Table 6). Regarding the reasons that would affect the (aware) non buyers' subgroup to buy organic food, these are presented in the figure below (Figure 4). Accordingly, 70% of the non buyers' subgroup stated that they would buy organic food if they were better informed on the Organic products' benefits, 67% if there was much more availability of orga-nic products in the market, 65% because of their concern about genetically modified food, while 55.1% of the aware non buyers subgroup stated that they would buy more organic

Table 2. Measures of the Rural Development Plan that are related to Organic production.

S/ N	Measure (title)	Objective	Beneficiaries	Rate/amount of support	Total budget for the period (2007-2013)
1.	Sub-measure 2.3.7: «Development of Organic Products»	To encourage the organic production both in the animal and plant sector in order to enhance environmental protection and biodiversity, reduce inputs and also increase the quality of the products, according to the provisions of R. (EC) 2092/91. It can be applied for both animal and plant production.	Farmers (natural and legal entities) as well as other land managers. In order to increase the environmental efficiency of this measure and to avoid land abandonment, other agricultural land managers are also eligible	1. Vineyards and multi annual aromatic plants: 1000 per Ha. * 2. Non-irrigated orchards, crops, vegetables, potatoes, annual plants: 750 per Ha. * 3. Annual non irrigated crops including cereals and plants for the production of organic animal feed: 380. 4. For organic animal production: 450 per Ha of pasture land.	7 million
2.	Measure 1.9: «Encouragement of setting up and administrative operation of Producer Groups».	To encourage the setting up of Producer Groups and Unions of Producer Groups, via a flat-rate aid based on the turnover or the value of annual marketed production. It supports in monetary terms the setting up and administrative operations of Producers Groups and Unions of Producers Groups.	Producer Groups and Unions of Producer Groups, recognised by the National Competent Authority (Department of Agriculture) until the 31 December 2013 and will be provided in annual instal-ments for the first five years following the date that the Producer Group has been recognised.	1. For production value: <=1 Million Euro; 5% of the production value for the first two years and then 4%, 3% and 2% for the third, fourth and fifth year. 2. For production value: >1 Million Euro; 2,5% of the production for the first two years and then 2%, 1,5% and 1,5% for the remaining years. 3. Max. support per Group: 100.000 for the first two years, 80.000, 60.000 and 50.000 for the three remaining years	8 million
3.	Measure 1.10: “Meeting standards based on community legislation”	To assist farmers to comply with the new and existing community standards in a transitional period of five years; limitation of nitrates in susceptible areas, meet the welfare standards in the case of pigs and poultry and meet the quality standards in the case of cow milk.	This issue is not addressed in any official document.	No information available	No information available

* For Categories 1 and 2, a derogation of 100 and 150 per Ha from the EU maxima is foreseen. The subsidy aims to support the loss of income due to lower productivity and higher production costs, mainly labor cost.

food if they could find it at lower prices than the typical ones.

The aware buyers of organic grocery products

In order to develop a more detailed profile of the 66 “aware buyers” respondents, a number of behavioural variables were selected (Table 7). According to the results (Table 7), the majority of the buyers’ subgroup purchases organic products rarely or once per week, while only 14% of the subgroup purchase organic food more than once per month. In addition, the organic food purchases of the 72.7% of the buyers’ subgroup are less than 25% of their monthly food purchases. Concerning the choice of the organic food, for the majority of the buyer’s subgroup (56.1%), this is a programmed one, while for the 42.4% of the

Table 3. Demographic characteristics of the respondents.

Gender *	N (160)	Unaware (16)	Aware buyers (66)	Aware non buyers (78)
Male	54(33.7%)	6 (37.5%)	21(31.8%)	27(34.6%)
Female	106 (66.3%)	10(62.5%)	45(68.2%)	51(65.4%)
Age				
18-25	18(11.3%)	4 (25%)	5(7.6%)	9 (11.5%)
26-40	68(42.5%)	2 (12.5%)	23(34.8%)	43(55.1%)
41-55	39(24.4%)	1(6.3%)	24(36.4%)	14(17.9%)
> 55	35(21.8%)	9 (56.3%)	14(21.2%)	12(15.4%)
Marital status				
Single	48 (30%)	7 (43.8%)	19(28.8%)	22(28.2%)
Married without children	35(21.8%)	3 (18.8%)	14(21.2%)	18(23.1%)
Married with children	70 (43.8)	3 (18.8%)	30(45.5%)	37(47.4%)
Divorced/ widows	7(4.4%)	3 (18.8%)	3(4.5%)	1(1.3%)
Education				
Primary / Secondary school	26(16.3%)	10(62.5%)	10(15.2%)	6(7.7%)
Lyceum	34(21.2%)	3 (18.8%)	17(25.8%)	14(17.9%)
College	28(17.5%)	1(6.3%)	11(16.7%)	16(20.5%)
University / Post-graduates	72 (45%)	2 (12.6%)	28(42.4%)	42(53.9%)
Employment status				
Full time	111 (69.4)	9 (56.3%)	43(65.2%)	59(75.6%)
Part time / unemployed	13 (8%)	1(6.3%)	7 (10.6%)	5(6.4%)
Housewives	18(11.3%)	1(6.3%)	10(15.2%)	7(9.0%)
Retired	18(11.3%)	5 (31.3%)	6(9.1%)	7(9.0%)
Family income (monthly)				
Below £500	22(14.4%)	9 (56.3%)	7 (10.6%)	7 (9%)
£501 - £1000	53(33.1%)	4 (25%)	22(33.3%)	27(34.6%)
£1001 – £1500	30(18.1%)	3 (18.8%)	12(18.2%)	14(17.9%)
£1501 – £2000	30(18.8%)	------	13(19.7%)	17(21.8%)
Higher £2000	25(15.6%)	-------	12(18.2%)	13(16.7%)
Area of residence				
Urban	130 (80.6%)	11(68.8%)	13(19.7%)	13(16.7%)
Rural	30 (19.40%)	5 (31.3%)	53(80.3%)	65(83.3%)

Table 4. Awareness of the organic products and definition of the term Organic Agriculture.

	Aware (n, %)	Unaware (n, %)
Awareness of “organic products”	144 (90%)	16 (10%)
Without chemicals (only one answer)	76 (53%)	----------
Without chemicals (with another definition)	68 (47%)	
- Natural/ Healthy food	37 (25.7%)	----------
- No pollution to the environment	33 (22.9%)	----------
- Traditional Cultivated	34 (23.6%)	----------

sample is an impulse response and for the rest (1.5%) is a reaction to a stock-out situation of the conventional products.

Regarding the selling outlet, where consumers usually buy organic food, most of the respondents stated that they usually do their organic grocery shopping at super-markets/ hypermarkets (54.5%), 42.4% of the respondents usually buy these kinds of products at specialized shops. 32% prefer buying organic products at fruit markets, 26% directly from the producer, while only 1.5% buys organic products over the Internet. The key sources of information on organic products for the Cypriot consumers are the printed and electronic press (75.8%) as well as friends’ and/ or colleagues (40.9%) and in a less extent

Table 5. Statistically significant differences (Mann-Whitney test (non-parametric test) between the unaware and aware subgroups, p<0.05).

	Unaware (16)	Aware (144)
Gender		
Male	6 (37.5%)	48 (33.3%)
Female	10 (62.5%)	96 (66.7%)
Age		
18-25	4 (25%)	14 (9.7%)
26-40	2 (12.5%)	66 (45.8%)
41-55	1 (6.3%)	38 (26.4%)
> 55	9 (56.3%)	26 (18.1%)
Marital status		
Single	7 (43.8%)	41 (28.5%)
Married without children	3 (18.8%)	32 (22.2%)
Married with children	3 (18.8%)	67 (46.5%)
Divorced/ widows	3 (18.8%)	4 (2.8%)
Education		
Primary / Secondary school	10 (62.5%)	16 (11.1%)
Lyceum	3 (18.8%)	31 (21.5%)
College	1 (6.3%)	27 (18.8%)
University / Post-graduates	2 (12.6%)	70 (48.6%)
Employment status		
Full time	9 (56.3%)	102 (70.8%)
Part time / unemployed	1 (6.3%)	12 (8.4%)
Housewives	1 (6.3%)	17 (11.8%)
Retired	5 (31.3%)	13 (9.0%)
Family income (monthly)		
Below £500	9 (56.3%)	14 (9.7%)
£501 - £1000	4 (25%)	49 (34.0%)
£1001 – £1500	3 (18.8%)	26 (18.1%)
£1501 – £2000	------	30 (20.8%)
Higher £2000	-------	25 (17.4%)
Area of residence		
Urban	11 (68.8%)	118 (81.9%)
Rural	5 (31.3%)	26 (18.1%)

Table 6. Statistically significant differences (Mann-Whitney test (non-parametric test) between the buyers and non buyers subgroups, p<0.05).

	Aware buyers (66)	Aware non buyers (78)
Gender		
Male	21 (31.8%)	27 (34.6%)
Female	54 (68.2%)	51 (65.4%)
Age		
18-25	5 (7.6%)	9 (11.5%)
26-40	23 (34.8%)	43 (55.1%)
41-55	24 (36.4%)	14 (17.9%)
> 55	14 (21.2%)	12 (15.4%)
Marital status		
Single	19 (28.8%)	22 (28.2%)
Married without children	14 (21.2%)	18 (23.1%)
Married with children	30 (45.5%)	37 (47.4%)
Divorced/ widows	3 (4.5%)	1 (1.3%)
Education		
Primary/ Secondary school	10 (15.2%)	6 (7.7%)
Lyceum	17 (25.8%)	14 (17.9%)
College	11 (16.7%)	16 (20.5%)
University / Post-graduates	28 (42.4%)	42 (53.9%)
Employment status		
Full time	43 (65.2%)	59 (75.6%)
Part time / unemployed	7 (10.6%)	5 (6.4%)
Housewives	10 (15.2%)	7 (9.0%)
Retired	6 (9.1%)	7 (9.0%)
Family income (Monthly)		
Below £500	7 (10.6%)	7 (9%)
£501 - £1000	22 (33.3%)	27 (34.6%)
£1001 – £1500	12 (18.2%)	14 (17.9%)
£1501 – £2000	13 (19.7%)	17 (21.8%)
Higher £2000	12 (18.2%)	13 (16.7%)
Area of residence		
Urban	13 (19.7%)	13 (16.7%)
Rural	53 (80.3%)	65 (83.3%)

specialized sales outlets (31.8%).

Another factor studied was the reasons that will affect buyers' decision on buying more organic food Figure 5**. Thus, 78.8% of the buyers sample responded that they would buy more organic food if there was much more availability, 75.8% because of their concern about Genetically modified food, 54.5% if they were better informed on the Organic products' benefits and 54.5% of the sample stated that they would buy more organic food if they could find it at lower prices than the normal ones.

Figure 6** presents in which product categories organic products have managed to gain the acceptance and preference of Cypriot consumers. It is obvious that the average Cypriot consumer does not substitute the conventional grocery products with organic ones. However, 61% of our sample purchases both organic and conventional fruits and 59% of the respondents usually buy both organic and conventional vegetables.

Concerning the kind of organic products consumed more frequently, the data was collected by the use of open-ended question. The most frequently purchased organic fruits were apples, pears, mandarins, grapefruits, strawberries and bananas. As for the most frequently

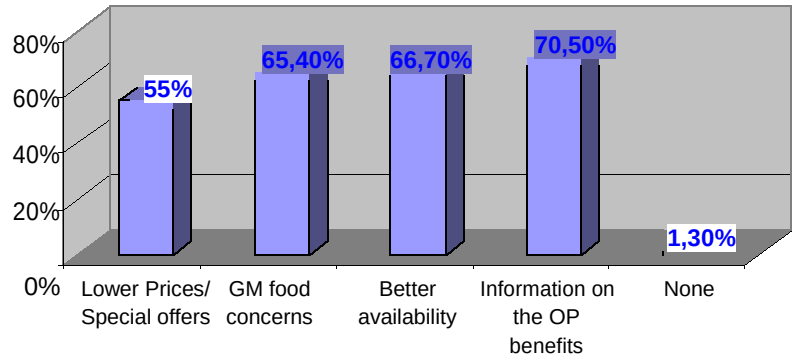

Figure 4. Reasons that will affect consumers to buy organic food.

Table 7. Behavioural variables of aware buyers' subgroup.

Purchase frequency	**%**
Rarely	27
Once per week	23
More than once per week	18
Once per month	18
More than once per month	14
% of organic food of the monthly food purchases	
< 25% of the monthly food purchases	72,7
25 – 50% of the monthly food purchases	18,3
51 – 75 % of the monthly food purchases	6,0
No answer	3,0
Organic Food choice	
A Programmed one	56,1
An impulse response	42,4
A reaction to a stock-out situation	1,5
Selling outlet: I usually buy organic food **	
At supermarkets/ hypermarkets	54,5
At specialized shops	42,4
At fruit markets	32
Directly from the producer	26
Via the Internet	1,5
Source of Information on OP: I usually find Information on OP by **	
Printed and electronic press	75,8
Friends and/ or colleagues	40,9
Specialized sales outlets	31,8
Specialists (nutritionists or agriculturists)	28,8

** The sum of these results is above 100%, due to the fact that the selection was multiple choice.

purchased organic vegetables, those were: tomatoes, cucumbers, carrots, cabbages, lettuces, herbs and onions. From the results it can be observed that the organic products, which bear the greatest demand, are the product categories that are consumed now and the ones that consumers find more safe (chemical free) than conventional to consume. "The majority of Cypriot consumers consider that their health is in danger due to chemical residuals in fruits" (Markou, 2003).

The results concerning purchases of organic food in this study seemed to be overestimated (as it was the case in studies of Gil et al., 2000; Frickle and Von Alvensleben, 1995; Radman, 2005). Most of the respondents who claimed to buy organic products such as olives and olive oil, fruits, vegetables, potatoes and wine, claim that they produce these products themselves or they buy them directly from producers. However, these products are not organically certified products. Thus, it could be assumed that Cypriot consumers cannot distinguish between organically produced products and traditionally cultivated products. Similar conclusions can be drawn out based on the fact that 22% of the respondents claimed that they buy organic products in fruit markets.

However, there are no products in fruit markets in Nicosia with organic labels. Therefore, we can conclude that Cypriot consumers make their own evaluations that the products they buy are organically produced. As a result, it can be claimed that Cypriot consumers are not well informed about organically produced products.

Organic versus conventional products

Consumers who were aware of the organic products, both "buyers" and "non buyers" subgroups were asked to compare organic products to conventional ones. According to their responses, Cypriot consumers' opinion on organic products seems to be very positive. The great majority of the respondents regard organic products compared to conventional ones as: chemical free (88%), healthier (85%), environmental and animal friendly (67%), more nutritious (58%), tastier and of better quality products (46% for each one) **.

On the other hand, 48 out of 144 respondents (33% of the "aware" sample) consider the purchase of organic products as not a good choice regarding the "value for money". As far as the products' appearance is concerned, 19% of the respondents believe that "organic products

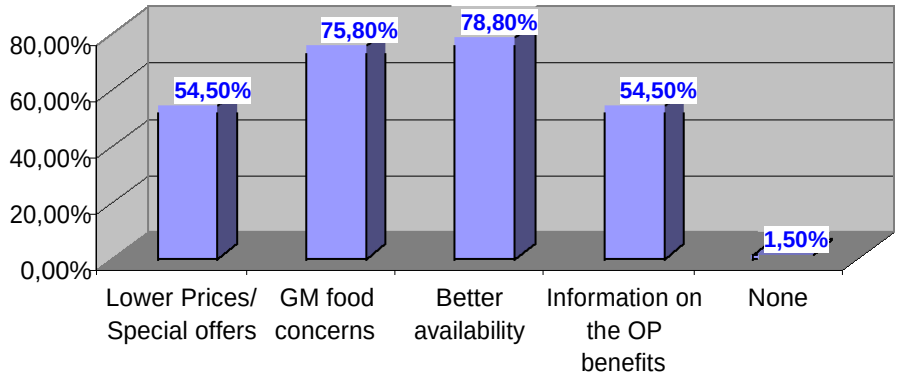

Figure 5. Reasons for buying more OP.

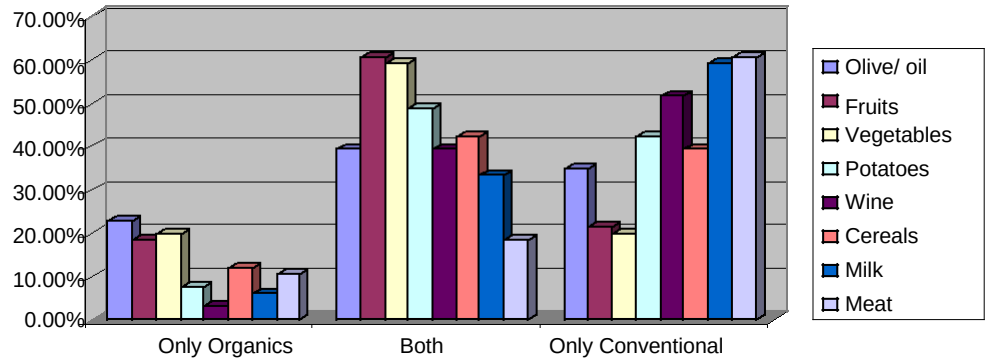

Figure 6. Organic Vs Conventional products.
** The sum of these results is above 100%, due to the fact that the selection was multiple choice.

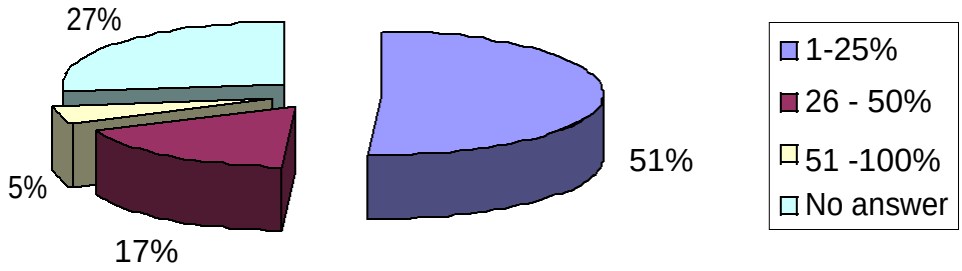

Figure 7. Willingness to pay extra money for organic products.

have poorer appearance than conventional" due to their size, shape and/ or colour, while another 30% of them disagree with this aspect.

Furthermore, consumers' perceptions for the availability as well as the variety of the organic products are not favourrable. The majority of them (61%) found the availability (61%) as well as the variety of organic products (53%) compared to conventional products very poor. ** The sum of these results is above 100%, due to the fact that the selection was multiple choice.

Willingness to pay premium prices

Respondents (both "buyers" and "non buyers" subgroups) were asked whether they were willing to pay a higher price for organic than conventional products and how much more they were willing to pay.

According to the results, 73% of the interviewees are willing to buy organic products at a higher price. This is in accordance with previous findings (Markou, 2003). In specific, 83.3% of the buyers subgroup are willing to pay

a higher price for organic than conventional products, while 64.1% of the non buyers subgroup are willing to do so.

In addition, 51% of the respondents would pay up to 1-25% higher prices for organic food, 17% 26 – 50% extra, while 5% up to 50% (Figure 7).

Perceptions towards the certification systems and legislation

A number of variables related to consumers' overall opinion on the certification systems were analyzed. These questions are related to consumers' "trust towards the certification controls" as well as their "preferences on local organic products". Furthermore, it was also analyzed whether and to what extent the respondents are aware of "the national legislation on OA".

In general, Cypriot consumers (both buyers and non buyers) trust the Certification Controls of organic products followed in Cyprus, since only a small percentage of the sample (4.2%) do not trust them. Even though 29% of the respondents remained neutral, the 24% believe that the certification controls are reliable.

Regarding consumers trust towards Cypriot certification labels compared to foreign ones, 37.5% of the respondents answered that they would trust both the same, while 23% of them would trust more a Cypriot label. This indicates the lack of Cypriot organic labels and the potential responsibility of the food manufacturers and the government.

Finally, as far as "the national legislation on OA" is concerned, 43% of the respondents (both buyers and non buyers' subgroups) are unaware of the national legislation. Only a small percentage of the respondents (13%) believe that the national legislation supports and promotes satisfactorily organic agriculture, 15% of the sample remained neutral to this question, while 29% of the sample disagree.

Producers' survey results

The sample was consisted of 21 producers. The demographic characteristics of the respondents as well as some general information concerning their production of organic products are presented in the table to follow (Table 8).

Contrary to the prevailing perception that the production cost of organic products is higher compared to conventional products; the majority of the respondents (52.4%) stated that the production cost of organic products is lower than the production cost of conventional ones, while 33.3% of the respondents believe that the production cost of organic products is higher than that of the conventional ones and 14.3% of the sample that the productions cost of organic and conventional products are similar (Figure 8).

As far as the reasons of which are affecting the increase in the production cost of organic products rather than the conventional products, a percentage of 33.8% of the sample claimed that this is due to the fact that there is

Table 8. Producers' demographic characteristics.

Age	Producers (21)
18–25	1 (4.8%)
26-40	3 (14.3%)
41-55	8 (38.1%)
Over 55	9 (42.9%)
Education	
Primary/ secondary school	3 (14.3%)
Lyceum	9 (42.9%)
College	4 (19.0%)
University / Post-graduates	5 (23.8%)
Employment status	
Full time	9 (42.9%)
Part time	12 (57.1%)
Certification body	
Lacon Ltd	18 (85.7%)
Biocert Ltd	2 (9.5%)
Transition phase	1 (4.8%)
Production of OPs	
Before 2000	1 (4.8%)
Before 2004	9 (42.9%)
2005	5 (23.8%)
Present	6 (28.5%)
Willing to increase their OP production	
Yes	8 (38.1%)
No	13 (61.9%)
Selling outlet **	
Directly to consumers	11 (52.4%)
Through Producers' Organisations	5 (23.8%)
Specialised shops	4 (19%)
Through wholesale market	6 (8.6%)
Other	1 (4.8%)

** The sum of these results is above 100%, due to the fact that the selection was multiple choice.

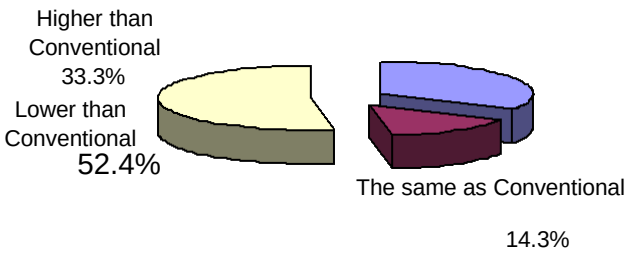

Figure 8. Production cost of organic products compared to conventional products.

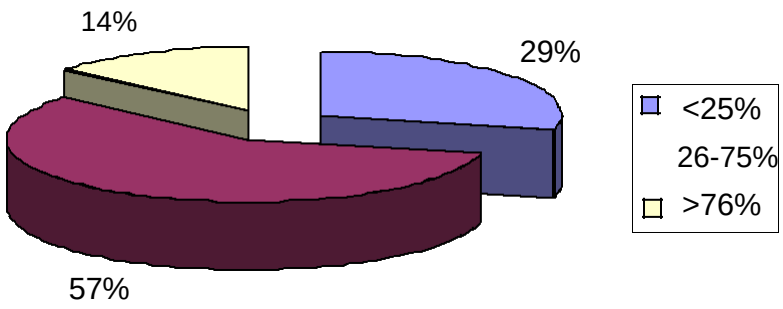

Figure 9. Percentage (%) production cost of Organic Products compared to Conventional Products.

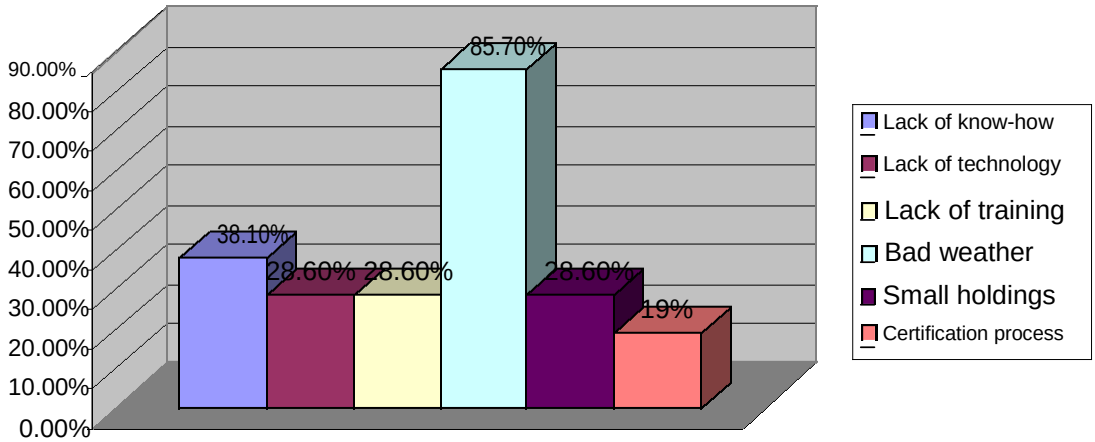

Figure 10. Weaknesses related to the production process of Organic products **.
** The sum of these results is above 100%, due to the fact that the selection was multiple choices.

low productivity, while on the other side a percentage of 23.8% due to the increased labour costs.

According to the results, the majority of the sample (57%) believes that the production cost of organic products is 26 to 75% higher than the production cost of conventional products, while 29% of the respondents estimate that the cost of producing organic products is less than 25% higher compared to the cost of producing conventional products. Finally, 14% of the sample believes that the cost for organic products is by 76% and above higher than the cost for conventional products (Figure 9).

Concerning the main weaknesses related to the production process of organic products, 85.7% of the sample responded that the bad weather conditions is the first constraint, while 30.1% of the sample agreed that the lack of know/how and experience considered to be the second constraint (Figure 10). As far as the price of organic products is concerned, the majority of the samples (76.2%) believe that the price of organic products is higher than the price of conventional products.

Figure 11 illustrates the main limitations concerning the marketing of Organic products. The majority of the sample (66.7%) responded that the lack of market organization is the most important constraint for the successful promotion of organic products, while 52.4% of the respondents considered the low demand as the second constraint and the 42.9% stated that another constraint is that of the limited number of retailers dealing with the marketing of organic products.

Respondents were also asked to choose from some statements about consumers whether they are true or false. The majority of the sample (85.7%) is confident that the demand of organic products will increase in the near future. Additionally, 81% of the respondents believe that consumers are willing to pay higher prices for organic products than conventional products.

The most interesting finding in this section is that the majority of the respondents (76.2%) believe that consumers are not aware of the Organic products as well as that there is lack of information concerning Organic Agriculture. Moreover, 85.7% of the sample rejects the statement that consumers are in favour of organic products.

Furthermore, it was analyzed whether and to what extent the respondents believe that the government supports

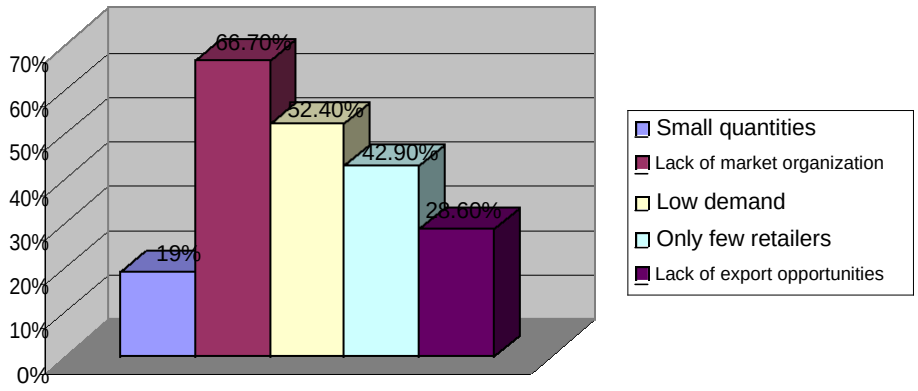

Figure 11. Limitations concerning the marketing of Organic products **.
** The sum of these results is above 100%, due to the fact that the selection was multiple choices.

Table 9. General information of retailers.

Selling OPs	**Retailers (11)**
Before 2000	4 (36.4%)
2001	1 (9.1%)
2002	1 (9.1%)
2003	1 (9.1%)
Before 2004	3 (27.3%)
Present	1 (9.1%)
(%) Organic food of total food sales	
Below 25%	2 (18.2%)
51 – 75%	3 (27.3%)
76 – 100%	6 (54.5%)
Selling outlet **	
Directly from producers	6 (54.5%)
Producers' Organisations	1 (9.1%)
Wholesale market	11 (100%)

** The sum of these results is above 100%, due to the fact that the selection was multiple choices.

satisfactorily the production of organic products. The majority of the sample (85.7%) agreed that the government does not support satisfactorily the production of organic products.

Concerning the main obstacles related to the expansion of Organic Agriculture**, 76.2% of the sample responded that the low motives and subsidies is the first constraint, while equal percentages of respondents agreed that promotion as well as production problems considered to be the second constraint (52.4% per each one), 33.3% of the respondents the low profitability of the Organic Agriculture. ** The sum of these results is above 100%, due to the fact that the selection was multiple choices.

Retailers' survey results

The sample was consisted of 11 retailers. As it is presented in the table below (Table 9), all the respondents, with the exception of one, begun to sell organic products before the year of 2004, the organic food sales of the majority of the sample is between 76 and 100% of their total food sales while 100% of the sample stated that they stock up their shops from the wholesale market, 54.5% purchase their organic products directly from producers and a small percentage (9.1%) from Producers´ Organizations and/ or marketing Cooperatives.

As far as the price of organic products is concerned, all the respondents (100% of the sample) agree that the price of organic products is higher than the price of conventional ones. According to the results, the majority of the sample (63.6%) believes that the price of organic products is between 25 and 50% higher than the price of conventional products, while 27.3% of the respondents estimate that the price of organic products is less than 25% higher compared to the price of conventional products. Finally, 9.1% of the sample believes that the price of organic products is between 51 and 75% higher than the price of conventional products (Figure 12).

As far as the reasons of which are responsible for the higher prices of organic products compared to the prices of conventional products, a percentage of 54.5% of the sample claimed that this is due to the small quantities of organic products which are produced locally, while on the other side equal percentages (45.5% per each one) believe that this is so due to the seasonality and/or discontinued supply of the organic food products and due to the increased marketing expenses (including transportation, advertisement, etc.) respectively (Figure 13).

Similarly to the producers' sample, all the respondents of the retailers' sample were asked to choose from some statements about consumers whether they are true or false. The majority of the samples (90.9%) are confident that the demand of organic products will increase in the near future. In addition, 81.8% of the respondents believe that consumers are willing to pay higher prices for organic products than conventional products. However, the majority of the sample (90.9%) believes that consumers are not aware of the Organic products as well as that there is lack of information concerning Organic Agriculture. Moreover,

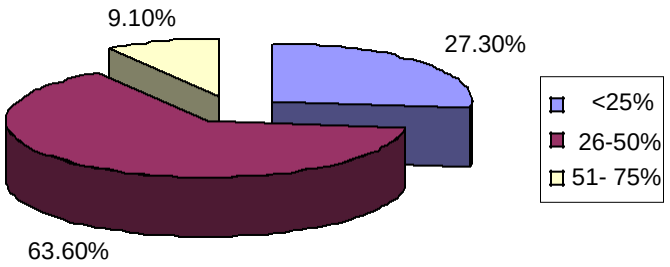

Figure 12. Range of prices of organic products compared to conventional.

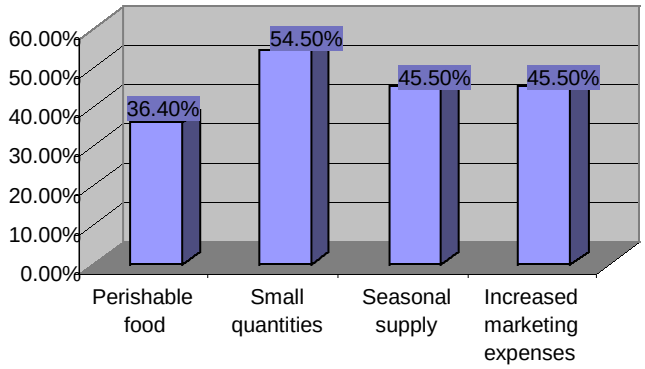

Figure 13. Reasons, responsible for higher prices **.
** The sum of these results is above 100%, due to the fact that the selection was multiple choices.

90.9% of the sample rejects the statement that consumers are in favour of organic products.

Figure 14 illustrates the main limitations concerning the sales of the Organic products. The majority of the sample (72.7%) responded that the discontinued supply/ seasonality is the most important constraint regarding the sales of the Organic products, while 63.3% of the respondents considered the high prices of Organic products compared to the prices of Conventional products as the second constraint and the 54.5% stated that another constraint is that of the limited variety.

Concerning the main obstacles, preventing the expansion of Organic Agriculture (O.A.), equal percentage of the respondents (that is 63.6%) agreed in the first place, that marketing problems (including small size and premature market) as well as high prices of Organic products compared to the prices of Conventional and also low government incentives/subsidies to OA producers, considered to be the most important constraints for further development of Organic Agriculture. While on the other side, 54.5% of them claimed that supply problems, such as small quantities, seasonality and weather conditions, are the obstacles to the further development of OA. The quality of the organic products is rather irrelevant (Figure 15).

Furthermore, it was analyzed whether the respondents believe that the government supports satisfactorily the promotion of organic products. The majority of the sample (90.9%) agreed that the government does not support satisfactorily the promotion of organic products.

Regarding retailers' willing to add new organic products in their stores in the next few years, all the respondents (100%) stated that they are willing to do so. Concerning the reasons that will affect retailers' decision to place more organic products in their stores, a percentage of 90.9% of the sample responded that consumers' demand is the first reason to make up their mind for doing so, another 63.6% of the respondents taking into consideration their own views regarding organic production process, another 54.5% of the sample stated that the expanded developing market of organic products would persuaded them to do so, while a percentage of 36.4% claimed that the market of organic products is a profitable activity**.

DEVELOPMENT OF THE PLAN

Pursuant to research results, inferred that production, but most importantly marketing, encounter certain shortcomings which slow down the full development of organic farming. Another obstacle is the existing legislation and its provisions or limitations. The next few paragraphs refer briefly to the various sources of problems, while the next section describes in detail the suggested measures.

Know- how possession and the amount of subsidy provided to farmers are the two most important factors associated with the production process and should be addressed through a national plan. Moreover, cropvarieties and the production process followed should be thoroughly examined in order to assess their suitability for Cypriot organic farming.

It is obvious that marketing faces the most serious weaknesses. Partly because it is an emerging market, and the organization structure of the organic market is still under development. Certain provisions should be ful-filled, in order the expected increased volume of organic products in the coming years, to be successfully disposed. The plan examines different aspects of the market in an effort to propose multiple solutions at various levels. It covers issues like Producer Organizations, quality standards, market research, national brand for organic products, the promotion of organic products, creation of a marketing board for organic products, etc.

All the proposed improvements will not be effectively promoted unless they are supported by a proper and comprehensive legislation and a relevant institutional structure. To this end, new legislation and amendments in the existing legislation, as well as new institutions are proposed.

Finally, the role of information and communication technologies, as a tool for the effective dissemination of knowledge and information related to the attributes of organic products and the benefits of organic farming could

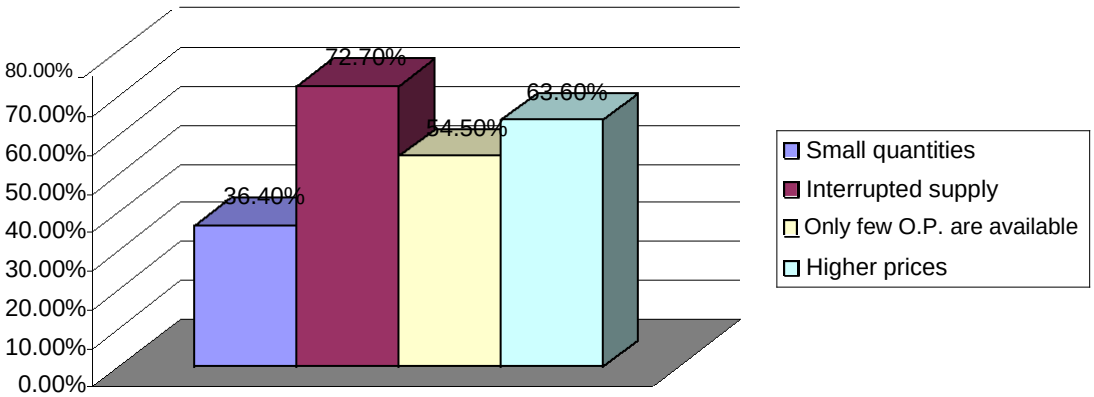

Figure 14. Limitations concerning the sales of Organic products **.
** The sum of these results is above 100%, due to the fact that the selection was multiple choices

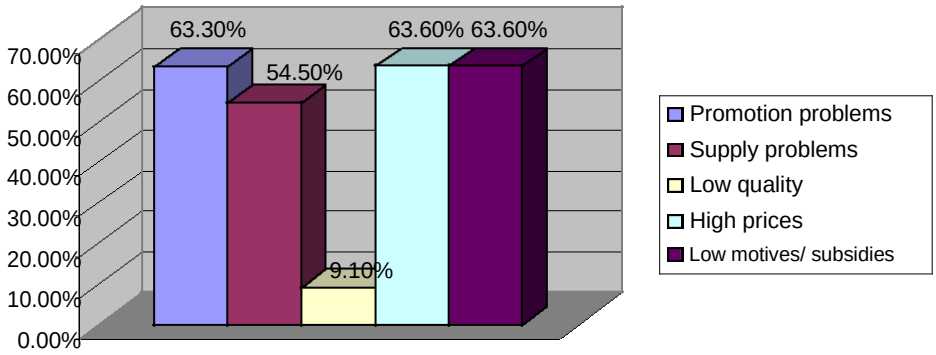

Figure 15. Obstacles concerning the expansion of Organic Agriculture **.
** The sum of these results is above 100%, due to the fact that the selection was multiple choices.

not be ignored. In this respect, a set of recommendations on the utilisation of modern technology is proposed.

Based on the above, the proposed plan is divided in four general categories: (a) Production. (b) Marketing. (c) Legislation. (d) Other measures.

MEASURES AT THE PRODUCTION LEVEL

The survey proves that shortcomings do exist during the production of organic products. Two of the main problems deriving from the producer level are:

(a) The need for more incentives at farmer's level.
(b) The lack of know-how. One third factor directly related to the competitiveness of organic products is the fact that the methodology used and the crop varieties cultivated have not been ever tested for their suitability for organic production.

Concerning the first factor, monetary support provided to organic farming is regulated by the European legislation. According to Rural Development Plan 2007-2013, Cyprus provides the maximum support projected in the relevant regulations. The support aims to offset the income loss due to lower yields as well as higher production costs and varies depending on the crop. It fluctuates from a minimum 380/ha for annual field crops, to a maximum 1000/ha for vines. It is worth noticing that in the case of vineyards and multi annual aromatic plants and non irrigated orchards, crops, vegetables, potatoes and annual plants, a derogation of 100 and 150 per Ha from the maxima is foreseen; that is, Cyprus, although through lawful processes, exceeds the European level of support. It is assessed therefore that there is no room for further increase in the monetary support provided to farmers.

Whatever the level of monetary support, it is also important to assist farmers through other means of indirect support. As a new production method, organic farming, presupposes mastering of certain know-how and possession of special training capabilities. The national plan for organic farming should include transferring of know-how from other member states through experts and continuous training activities, tailor made to organic farmers. A detailed training plan, including training activeties, workshops and on the spot visits, should be elaborated.

Organic farming has been introduced in Cyprus 10 years

ago. The production methodology used so far is similar to the one used in other EU member states. The same applies for the varieties used, which are identical to the conventional ones. However, for a successful organic farming it is not enough to convert the traditionally cultivated varieties into organic, nor to transfer the methodology applied in other countries in the Cypriot environment. In contrary, agricultural research should aim to identify the production methodology, which is better fitted to local weather conditions, as well as to test new varieties, which are better adapted to the local environment; they are more productive and lead in the reduction of production costs. Therefore, the national plan should incorporate agricultural research in the field of organic farming as a continuous and supportive activity.

MEASURES AT THE MARKETING LEVEL

Producers' organizations

It is crucial for producers and the viability of their activities to increase their influence in the marketing process of organic products. The implementation of the Rural Development Plan supports the creation of producers' organizations (POs) . However, four years after the implementation of RDP only a few POs for organic products have been established. As a result, the marketing of organic products is concentrated in the hands of middlemen, a fact that increases the profit margins and contributes to high price gaps between producers and consumers. Additionally, the limited number of POs and the fact that producers are not well organized allow to the middlemen to control the market of organic products and probably exploit them in their transactions.

It was clear from the research that an increase in the availability of organic products will affect the sales of organic products. Although limited availability is currently the result of physical limitation, given that the area under organic farming in the near future will increase, the quantities sold will increase as well. Therefore, more traders and more outlets should be involved in the disposal of organic products.

In section Organic Farming in Cyprus, it was explained that Producers' organizations are strongly supported by the RDP measure 1.9. "Encouragement of setting up and administrative operation of Producer Groups". It should be examined though whether the terms and conditions set for the creation of POs can be met; otherwise the relevant provisions should be redefined in order to allow the creation of viable and competitive POs.

It is straightforward that by increasing the number of POs, the marketing of organic products will be enhanced with multiple benefits for the producers, consumers, as well as for the national economy. Producers will be better off since they will be able to extend their activities to the marketing of organic products. They could create their own disposal outlets and even engage in the processing of organic products. Therefore, they could schedule correctly their production, market their own products and become part of the game in setting consumer price. Being part of POs farmers will also have better opportu-nities to buy cheaper inputs and even use collectively ex-pensive infrastructure, machinery and modern technology. Eventually they will have better opportunities to increase their income.

By increasing the number of POs consumers will also be in a better position since the distance between themselves and the producers will be reduced. In this respect, they could find easily as well as in adequate quantities and at affordable prices, the organic products they want.
The national economy will also be benefited if certain subsidies are provided only to farmers' organizations and not to the farmers as individuals. Therefore, the national economy will be benefited from higher absorption of community funds. Additionally, the possibly established POs will be well organized and capable entities with all necessary structures to plan, produce and sell successfully their products. In this respect, the funds provided to farmers due to unsold quantities or other marketing problems will be diminished.

Market research

Nowadays, even in Cyprus, consumer preferences are changing faster than in the past. Among others, factors like globalization, the new style of living, expansion of products offered in the market, increase in the standards of living, and enhanced marketing opportunities, contribute to faster changes in consumer preferences. Market research is a scientific tool, which makes the monitoring of changes in consumer preferences possible and provides the necessary information for timely and correct planning of what and when to be produced.

So far, market research is conducted by the Ministry of Commerce and Industry only in the export destinations of agricultural products. This type of market research is a rather occasional activity and refers only to a few agricultural products with export potential, like potatoes and citrus. There is no indication that the case of organic products has been included in this type of market research. Concerning the local market only a few fragmented activities, mainly as part of special projects, have been dealt with market research of organic products.

The question that has to be answered is how the farmers decide what to cultivate and in what quantities. The answer is simple; there is no guidance concerning the kind of product or the quantity to be produced. Each farmer follows his instinct and his personal observation on the prices received by organic products in previous years. There is also a commitment undertaken in the frame of the RDP for those deciding to engage in organic farming and a list of the eligible crops or animals receiving subsidy under the relevant support measure. The final decision though, remains to the hands of each

individual.

Organic farming, as other agricultural activities, is guided and obeys to the rule of the market, that is, the offer (production plus imports) should meet the demand. Otherwise, if the offer exceeds the demand prices decrease. According to the research, so far demand of organic products is higher than the offer. However, given the areas under transition it is very likely that in a few years the increased offer will lead to a reduction of consumer prices.

It is important though, for organic farming, to have in place mechanisms which can monitor and assess the level of consumer satisfaction and trace the changes in consumer preferences. In the case of organic farming, there is no evidence that a systematic monitoring of consumer preference in the local market exists. It is of outmost importance to those engaged in the production and marketing to know exactly what the consumer demands, when, and how much he/she is willing to pay for it. The establishment of a consumer observatory for organic products could provide all necessary information on a continuous basis. It can provide farmers with detailed information on what to produce in order to meet consumer demand by avoiding unnecessary waste of resources; a development that could lead to higher producers´ income and to more satisfied consumers.

Quality standards in the local market

Under normal market conditions, goods traded in the market are rewarded according to their quality, i.e. better quality receives higher price. This rule applies to all goods; either the good is an industrial product, a service, or an agricultural commodity. In the case of organic products, traded in the local market, this rule does not apply. In reverse, all qualities receive the same price.

So far, quality standards are applied to agricultural products exported but not to those traded in the local market. According to commitments undertaken during accession negotiations, Cyprus should implement quality standards on agricultural commodities traded in the local market.

Implementation of quality standards implies that better quality will receive higher price; a direct motivation for farmers to improve the quality of their organic products and a chance to consumers to get higher value for their money.

Since it is not clear whether Cyprus authorities possess the manpower and the institutional infrastructure needed to monitor effectively the implementation of quality standards in the local market the national plan should include a provision to assess the institutional capacity of national authorities to implement the quality standards. The outcome of the relevant assessment will be a detailed analysis of the existing situation and suggestions for actions needed to implement and monitor successfully the quality standards.

National brand for organic agriculture

The national legislation for the production, processing and marketing of organic products is in full compliance with the European legislation. In this respect, the allowed inputs (fertilizers, pesticides, etc) and handling procedures followed in organic farming are thoroughly projected, regulated and well known in advance.

Other issues, like labelling of organic products are regulated through the European legislation. Cyprus implements the European legislation. However, apart from the common European logo, almost each member state has its own national brand for organic agriculture.

It is important, both for the producers, but particularly for the consumers, the local organic products to carry a national brand since in a relevant research conducted by the Agricultural Research Institute the vast majority of Cypriot consumers (90.5%) prefer local fruits instead of the imported ones (Markou, 2003).

The existence of Cypriot national brand for organic agriculture is considered essential since it will differenttiate the Cypriot organic products and protect them from similar commodities of other origins. It is considered important therefore for the national plan to promote the creation of a national brand for organic products.

Promotion campaigns

According to research findings the consumers, either buying or not buying organic products, they are aware of organic products. However, both the producers, as well as the retailers, claimed that consumers are not aware of organic products and their attributes. Whatever is true, it is important for the citizen to have free and easy access to the information related to organic products.

Currently different aspects of organic products are addressed by various departments within mainly the public administration, in a fragmented way. For instance, issues like monitoring of legislation compliance and the registration to the relevant registrars is the responsibility of the Department of Agriculture. The certification process is the responsibility of private companies. Marketing of or-ganic products is mainly the responsibility of the Ministry of Commerce and Industry while issues related to the hygiene of organic products is the duty either of the Veterinary Services Department or the Ministry of Health.

It is obvious that the above fragmented structure does not allow the integrated and effective promotion of organic products. On the other hand, the advertisement and promotion of organic farming is not part of the existing policy.

Given the need to communicate the attributes of organic products and the fact that the current structure does not support the successful promotion of organic products, relevant arrangements are projected in the national plan. One suggestion is that the organization of special campaigns should be designed to bring forth

organic farming benefits to the society, organic product attributes, and health advantages. In such a campaign all the available mass media, including electronic and printed forms of telecommunication will be utilized.

Special market for organic products

According to the research most producers use the wholesale market as a disposal outlet for their organic production. Other market chains, like supermarkets, specialised shops, and producer organizations, are used in less extend.

In Cyprus each big city has its own popular market (laiki agora), where producers of conventional agricultural commodities sell their own products directly to consumers. The creation of a specialized organic products market, could facilitate the successful and in a costless manner placement of organic products in the market. Additionally, it could reduce the transaction costs and contribute to lower consumer price.

Marketing board for organic products

One direct impact of globalization and of the competition arising in the foreign markets, Cypriot exports diminished drastically during the last decade. As a result more quantities of agricultural products remain unsold in the local market destabilizing the market and reducing their prices.

The marketing of organic products is mainly undertaken by middlemen. Small quantities are sold through specialized shops or directly from producers to the consumers. On the exports side only one private company is engaged in the exports of organic products, materializing rather minor exports.

The establishment of a Marketing Board for organic products could assist the creation of effective marketing chains. It could also promote export activities in order to provide outlet to excess supply and keep prices in the local market at a profitable level. Such a Board could embrace all traders including producers' organizations, private companies and marketing cooperatives. Its activeties could be financed by the relevant measure of the RDP for the promotion of agricultural products.

LEGISLATION

The national legislation in force is considered adequate to secure compliance with the acquis communautaire. One issue related to the frequency and adequacy of inspecttion and compliance controls is the fact that by law, those controls are entirely conducted by the Department of Agriculture. As the number of farmers and/ or retailers will increase in the near future the Department of Agriculture probably could not be able to meet the inspection and compliance demand. Therefore, the government should examine the possibility of delegating the responsibility of controls to private entities. In order to facilitate delegation of responsibilities to private institutions the relevant legislation should be properly amended.

Another area of which will be required new legislation relates to the need of establishing a Marketing Board for organic products. Since different entities could participate in this Board new legislation should be prepared and ratified.

Finally, new legislation is required for the creation of a National Brand for organic products. The relevant legislation should set the requirements, the logo used to distinct the national brand, as well as the institutions responsible to implement and monitor the relevant legislation.

OTHER MEASURES

Internet and ICT applications

The fact that only two certification bodies have been so far recognised creates monopoly or oligopoly imposing farmers and retailers willing to engage in organic farming along with high expenses. It is estimated that if more certification bodies are recognised more competition will be created in the market and therefore the expenses as far as the certification process will be reduced drastically. The Department of Agriculture should examine ways to encourage more certification bodies to involve in the certification process.

Information and Communication Technologies play a key role in every single manifestation of our life. ICT applications, like the internet and the web, are becoming more important in our daily life. ICT can remove the barriers and minimize the distances, changing the whole world into a single neighbourhood. The expansion of internet trade and the recorded trend towards a technology driven economy worldwide widens the opportunities and enhances the potential for faster development of organic product trade. So far numerous web sites worldwide are dedicated to organic farming. These sites not only provide information about the attributes and the benefits of organic products but are used also as sales outlets.

Understanding the capabilities of ICT and utilizing its potential the disposal of organic products will be facilitated. To this end, the establishment of a national portal for organic products will facilitate the dissemination of information regarding organic products, provide a forum to producers, sellers and buyers, and eventually increase sales of organic products.

A national portal for organic products is a must in the case of Cyprus for one additional reason. The relevant market is still under development and somebody could argue that there is a distortion in consumer prices. Therefore, such a portal could eliminate the impacts of the premature market and neutralize the decisive role of middlemen by providing a meeting forum to all potential

sellers and buyers of organic products.

SPECIFICS OF THE NATIONAL PLAN

The National Action Plan for organic agriculture should be in line with the relevant European Action Plan for Organic Food and Farming prepared by the Commission of the European Communities in 2004. With its commu-nication "the Commission intends to assess the situation and to lay down the basis for policy development in the coming years…." (COM 2004, 415 final).

The communication aims to promote the dual societal role of agriculture, i.e. organic food marketing, in response to the concerns of consumers, and organic land management, including the animal welfare. Moreover, the communication is an effort to stabilize the market of organic products in terms of supply and demand and to facilitate the establishment and monitoring of common standards in the various member states.

The communication includes 21 actions covering the organic food marketing in terms of legislation amendments, promotion campaigns and creation of internet databases, support measures to enhance organic production, technical assistance from independent experts, systematic comparisons between the community standards and Codex Alimentarius and the IFOAM standards, and monitoring procedures to secure the compliance of member states with European legislation.

Although not compulsory for the member states, the European Action Plan for Organic Food and Farming provides a vehicle through which countries could align their national policies concerning the production and marketing of organic products.

Being part of the EU Cyprus has to follow the European Action Plan for Organic Food and Farming guidelines which is over and above the existing community legislation.

Conclusions

Organic farming is practised worldwide. It is well developed in most of the EU member states while in a few of them has been recently stagnated. In Cyprus OA is still under development. Given the areas under the process to convert into organic, it is expected that the volume of organic products in Cyprus will be doubled in a few years.

The national legislation and the institutions created to control the production, processing and trading of organic products are in full compliance with the European legislation. Rural Development Plan, the national handbook for agricultural policy issues, provides significant levels of subsidies in an effort to promote organic farming.

The available information concerning the production, trade and consumption of organic products in Cyprus is very limited. In order to introduce a plan to place successfully organic products in the local market, the appropriate information is needed. The present study collects primary information from producers, consumers and retailers in order to test certain hypotheses and propose an action plan to address the issues identified during the research.

According to the research, although the majority of consumers are aware about organic farming, only four out of ten buy certified organic products. The unstable frequency in buying organic products, the small quantities purchased and the low availability of organic products are indications that the market of organic products is still under development. The most important feature of consumers´ survey is that all consumers, either purchasing organics or not, are willing to pay higher prices to buy organic products. Better availability of organics and GMO concerns will affect consumers to buy more organics. Additionally, consumers trust or are neutral to the national certification controls. Regarding their demographics, consumers with higher education and higher family income tend to buy organic products.

All of the producers are registered by certification bodies. According to producers, the cost of producing organic products is lower than the cost of producing conventional ones. The two most important inhibitory factors at the production level are bad weather conditions and lack of know-how. According to growers, market organisation is the most important weakness in the successful promotion of organic products. Interestingly, although organic growers are confident that the demand of organic products will increase in the near future they are reluctant to increase their production imposing that government does not support satisfactorily organic production. One contradiction is the fact that although growers believe that consumers are willing to pay higher prices for organic products, they claim that consumers are not in favour of organic products.

Both producers and retailers claim that consumers are not aware about organic products. Retailers are willing to add new organic products in their stores in the coming years. Retailers rank as the most important obstacle for further development of organic farming marketing problems (like the small size of the market, high product prices), low government incentives and the fact that only a few kinds are available in their organic form. Retailers argue that consumer demand, personal considerations about organic production and the fact that organics is an emerging market, will affect their decision to place more organic products in their stores.

A national plan to place successfully organic products in the local market should incorporate all the issues identified during the research. Additionally, it should be in line with the European Action Plan for Organic Food and Farming initiated by the European Commission in 2004. In this respect certain measures in the production and marketing of organic products, legislative/ institutional arrangements and other supportive measures like the use of modern technology, should be introduced.

On the production level, training activities to enhance the know – how level as well as agricultural research aiming

to identify crop varieties and /or methodologies adapted to local conditions are proposed. On the marketing level the suggestions include the establishment of more producers' organizations, the creation of more selling outlets and the operation of a special organic market, factors that will facilitate the control of the market and reduce the gap between producer and consumer price. Intensification of market research, creation of a national brand for organic products, establishment of a Marketing Board for organic products and implementation of the quality standards in the local market, special promotion are also proposed.
On the legislation/ institutional level modifications on the existing regulations as well as new legislation is required. The full exploitation of ICT with the creation of a relevant portal for organic product is also proposed. As regards the action plan itself it is proposed to last for five years. An outline of the actions to be taken during this period, including who, what, when, is also proposed.

Most of the measures proposed, do not imply signifycant costs. For those measures, however, which require substantial costs (like the promotion campaign) suitable arrangements should be inquired. They could be covered either by the RDP or by national funds, always with the approval of the EU relevant authorities. It is expected that the implementation of the proposed national plan will resolve all problems associated with the production, but most importantly with the marketing process, and provide a better chance for organic products to be placed successfully in the local market.

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