

ORGANIC SECTOR IN UKRAINE 2004

A summary of the present state, challenges and strategy discussions

Viktor Vovk, Ph.D.

sustainable development public policies expert,
consultant to the Ukrainian Parliamentary Committees

Mykhaylo Kapshtyk, Ph.D.

Programme Development Expert,

Training and Coordination Centre of Agricultural Advisory Services

Organic Agriculture Committee Member to the Ukrainian Farmer and Land Owner Association

Organic (ecological, biological) agriculture in Ukraine, though having a great potential, is at present only at the initial stage. This early development of organic farming in Ukraine is distorted by the current dominant focus on export production of organic grain on large-scale farms, while the conversion of small and middle-sized farms and production of other crops remains a subordinate activity. Organic processing and retail trade of organic food are still in a rudimentary state.

Nevertheless, the organic sector in Ukraine, though faced with a number of problems and challenges, is highly promising and prospective in a country with fertile soils and strong agricultural traditions.

1. History and Development of Organic Farming in Ukraine

In Ukraine, although natural soils are among the best in the world, nowadays much of the arable land is under different degree of degradation that causes a decrease in soil productivity. Surveys in the mid 1990s revealed that about 35.8% of land is eroded, 25.6% has increased acidity, 9.7% are saline and alkali, 8.9% over-humid and swampy. On the other hand, as a result of the prolonged economic crises, in particular due to a shortage of on farm operational funds, in the last decade there has been a great fall in the use of mineral fertilizers, pesticides and other chemicals, thus suspending the decrease in the quality and promoting rehabilitation of the natural fertility of soils. Accordingly, there are now considerable areas of environmentally clean black soils, which may be transformed to organic farming during a relatively short conversion period.

In the past, there were several experimental farms involved in the soil-preservative “biological methods of agriculture” (since 1979). However, ecological concerns had never been an important issue for the former soviet Ukrainian industrialized agriculture in order to launch a conversion to environmentally friendly methods of farming, including organic (ecological, biological) farming.

One of the first opportunities for familiarization with organic agricultural production was the visit in November, 1997 of a group of specialists from an agricultural, scientific and educational institution in Ukraine to the Institute of Organic Agricultural Production and a group of organic and biodynamical farms in Switzerland. In 1998 training seminars were held for scientists, education specialists, and producers from Ukraine on the base of the National Agricultural University and Berezhany Agritechnical College on issues of certification, production, marketing and processing of organic production, organization of training and extension in the area of organic agricultural production with the participation of Ukrainian and Swiss specialists. As a result of the seminars the book *Soil Protecting Organic Farming in Ukraine* was published, where the Swiss model of organic farming was well described. Following participation in the seminars and learning about the principles and advantages of organic agricultural production many individual farmers and representatives of large reformed farms expressed their willing to transfer to organic agricultural production. Their transfer has been delayed due to not enough developed production marketing chains and the absence of the system of state support and stimulation of organic agricultural production.

In 2000-2001 a Swiss-Ukrainian Project on *Organisation of Stable Production of Organic Hard Wheat* was implemented aimed at its further export to Switzerland. The National Agricultural University as well as a set of pilot farms prepared for conversion were involved in this Project.

In the framework of the Swiss-Ukrainian Project it was necessary to solve not only the problem of ecological production purity but also its biological full value in accordance with the requirements and needs of processing companies. Participation of farms in this Project was a good lesson on how to work in organic production led by the market. In the framework of the Swiss-Ukrainian Project, Bern Agricultural University from Switzerland in cooperation with the National Agricultural University of Ukraine developed a leaflet for Ukrainian farmers: ***Organic Biological Agriculture in Ukraine***. Logistical arrangements for the process of organic production export from Ukraine to Switzerland were developed and economically based. The first trial party of hard wheat was sent from Ukraine to Switzerland in 2003.

In September 2001 an international scientific and practical seminar on introduction of organic agriculture in Ukraine was held in L'viv. Economical and technological aspects of alternative ways of agricultural production including organic farming were studied at the seminar. Many agricultural producers, representatives of Departments of Agriculture and Food of the western region of Ukraine participated at the seminar as well as representatives of agricultural scientific and educational institutions, the Training and Coordination Centre of Agricultural Advisory Services of Ukraine, and specialists from Switzerland and Germany. This seminar gave only a slight push to the development of organic farming in Western Ukraine, as the issues of marketing and creation of a national certification system etc were not studied. These activities were coordinated by a non-governmental organization "Zhyva Zemlia" (Live Land) and the Swiss-Ukrainian Project "Kul'baba" (Dandelion - Кульбаба), operations of which were not widely spread in the Ukrainian agricultural sector.

It was, primarily, a great wave of conversion to organic farming in the European Union and the rapid growth of the organic products market in 1990s that induced the establishment of the first certified organic farms in Ukraine. During the recent years dozens of farms and many thousands of hectares have been converted, primarily in Southern Ukraine (Odesa and Kherson regions), Central Ukraine (Poltava region) and Western Ukraine (Ternopil' and L'viv regions).

The number of organic farms in Ukraine in 2003 amounted to about 70 managing altogether 240,000 hectares. Although the number of farms is still very small, their share of the total agricultural land in the country is already quite noticeable (about 0.6%) and the organically cultivated area is comparable to that in neighboring (Eastern European) EU countries. The vast majority of Ukraine's organic farms are big-scale, with the average size exceeding 3,000 hectares. Plant production is mainly limited to grain, mostly wheat, with exports as the major target. Animal husbandry is virtually absent.

Narrowness of organic agricultural production development leads also the fact that producers do not gain enough profit from organic farming. Obviously that traders who export grain to foreign countries and who own certificates obtain higher profit.

In 2003-2004 several small farms in the Vinnytsia, Ternopil', Kyiv and Luhans'k regions have been converted to organic farming as a pilot project based on technical assistance provided by the Swiss Cooperation Office within the ***Eco-Lan: Sustainable Land Use in Ukraine*** project launched in January 2003.

Another effort to promote conversion of small farms to organic farming is now in progress in the L'viv and Transcarpathian regions supported by the joint American-Polish organic producer *SYMBIO*, which has developed cooperation with more than 300 small organic farms in Poland. Assisted by the USAID

funded *Agricultural Marketing Project*, *SYMBIO* is expanding its production activities across the border to Western Ukraine and implementing its highly successful cluster model to involve small Ukrainian farms in organic production of vegetables and fruit for export to the EU and USA.

There are also sporadic initiatives by small farmers in different regions to convert to organic farming.

First National Strategy Discussions

First discussions on the necessity of the development of the national strategy in the area of organic agriculture in Ukraine started at the end of 90s of the last century with the involvement of representatives of the Institute of Organic Agriculture (FIBL) from Switzerland.

Terms of reference for the *Project of Global Ecological Fund* grant for the second stage of biological diversion support were developed in April 2002. In the section dedicated to preservation and stable production of bio-diversion, which is of great significance to agriculture, main objectives for the Government of Ukraine for the implementation of the Convention on bio-diversion preservation joined by our country were drafted.

The objective related to the necessity of introduction of ecologically balanced agricultural technologies, development of proposals for state support to the methods of agricultural production assisting to preservation and renovation of biological diversion was settled. The emphasis was made on the necessity of state support and stimulation of organic agricultural production through the adoption of a relevant law and state programme, creation of a national system for certification and control and their accreditation at **IFOAM**.

In the process of Project implementation funded by *Global Ecological Fund*, other institutional needs and measures required for the transfer to ecologically balanced agricultural systems assisting bio-diversion preservation were determined.

In October 2003, a Ukrainian-Swiss seminar for the first time brought together different organic stakeholders to discuss the actual situation, challenges and public policies, and to exchange ideas on a national strategy of organic farming development. The participants included Ukrainian governmental officials, policy experts, representatives of the organic business community, including farmers, exporters and certification bodies, academics, non-governmental organizations, as well as the representatives of the Swiss partners and the leading international organization – **IFOAM**.

It was agreed that organic agriculture has the potential to result in economic, social, environmental and rural development benefits in Ukraine. In the last decade, significant areas of fertile agricultural land have been cultivated with little use of agro-chemicals and could be quickly converted to certified organic agriculture, provided that markets are available and certification costs can be kept low. In many cases, yields under organic agriculture after the conversion period are higher than under traditional management practices. Thus, organic agriculture offers opportunities, affordable to both big farms and small-scale farmers, to improve their production efficiency and profitability.

However, in order to take advantage of organic agriculture, Ukraine, like other nations in transition and developing countries, needs to overcome a number of constraints. To address them at the national level the on-going strategy discussions focus on issues such as increasing public awareness of the potential economic, social, environmental and health benefits of organic agriculture; the need for well-defined governmental policies and regulations; and promoting organic products consumption, for example through consumer information. A special focus is on the need to develop and enforce a national organic guarantee system, based on international standards that enable achievement of equivalence, and capitalizing on an international certification infrastructure and partnerships.

Challenges and Outlook

A potential organic farming boom in Ukraine will necessarily require favorable governmental policies and regulations. Like in other European countries, a major factor that could contribute to a mass conversion of farms, especially small and middle-sized farms, would be governmental subsidies such as a subsidy program for conversion and certification, and an agro-environmental program.

The experience of the EU (e.g. Austria) shows, however, that “incentives concentrating on the production side are not sufficient to develop a production chain from the farmer to the consumer”. The success of the organic industry depends on the recognition of its products by the public, i.e. on consumers’ trust and demand. Thus, another big challenge in Ukraine is development of both marketing channels and public awareness of the various merits of organic products, especially for public health.

Domestic market development will require enforcing a national organic guarantee system to protect Ukrainian consumers, overcome the lack of confidence and create trust. Besides, the legal standards and certification system should aim at establishing international equivalency of Ukraine’s organic guarantee system to promote export of organic products.

Finally, a major challenge facing Ukraine is developing a co-operative management of the organic sector that will be capable to secure the synergy of governmental policies and market forces as the basic mediators between producers and consumers.

2. Standards, Certification and Perspectives for Governmental Regulations

In the 1990s governments of various states started entering the organic area by developing laws or mandatory rules of production and/or certification. The basic reason for organic standards and regulations is to “protect the consumers”. In Ukraine, the legal standards for the organic sector so far have not been defined. The existing organic farms involved in exports are inspected by the foreign certification bodies active in Ukraine (like *Skal International*) and certified according to the standards of the export markets, primarily **EU Regulation 2092/91**. The small farms converted to organic farming in the framework of the Swiss assistance program are inspected and certified by a Swiss certifier according to the Bio-Swiss standards.

Drafting National Regulations

Ukraine is now in the process of drafting regulations. In February 2004 a special working group was formed that included experts from the Parliamentary committee on agricultural policy, coordination secretariat on agrarian issues under the Cabinet of Ministers, ministry of agriculture and the farmers’ association. Due to Swiss support, it receives legal and policy advice from leading IFOAM experts. The working group agreed that regulating the sector at this early stage should help the development of organic production and consumption in Ukraine. It is supposed the basic law will regulate organic farming, processing and trade and provide for:

- a set of minimum production and processing principles which must be complied with in order for products to be labeled “organic”;
- an obligatory inspection regime for placing organic products on the market, whether they are from Ukraine or imported;
- a legal protection for the label “organic” and a national logo for identifying organic products.

The law will give the organic sector a legal definition and its production methods will be accorded official recognition. This will allow the sector to clearly identify itself to consumers and to guarantee

the organic products it places on the market are credible, and are really organic products with corresponding consumer advantages, especially as healthy food. Thus, the regulation will facilitate the organic sector in finding its place in the market, recognized by the food industry and the distribution chains, including the supermarkets, and by the general public.

The law should also protect farmers involved in organic agriculture and permit a fair competition with other producers within Ukraine, or in other countries. Such climate of protection will stimulate farmers to undertake the investments that are necessary to convert to organic farming. It will also promote the organic sector by means of future financial support from governmental subsidies, agro-environmental programs and official research programs that might be stipulated by law.

It is planned that the law will set out only general provisions and guidelines, with the establishment of detailed standards and the system for accreditation of certification bodies left to the executive bodies. The more detailed requirements and arrangements will be established by the appropriate implementing legal regulations, issued, presumably, by the ministry of agriculture and ministry of the environment.

To guarantee product quality to the consumer, it is possible that the law will enable a governmental agency or another authorized body to introduce an “**Ukraine Organic Label**”, which might be mandatory for organic farmers, processors and traders.

Establishing International Equivalency of a National Organic Guarantee System

Promoting production and exports of organic products from Ukraine by ensuring international equivalency of the future national organic guarantee system is a major objective of the working group in drafting the Ukrainian regulations.

Organic agriculture is an increasingly important part of international activities in the areas of commodities, trade and environment. **UNCTAD** aims “to enhance the production and export capacities of developing countries of agriculture and food products, including niche products, such as environmentally preferable products” (*UNCTAD Expert Meeting, Geneva, 16-18 July 2001*).

Neighboring countries in Central and Eastern Europe have recently developed legislation and structures to align themselves to the provisions of **EU Regulation 2092/91** which has become the regulatory framework for them after EU accession. Recently the two other large organic consumer markets, Japan and the USA, have taken similar regulatory initiatives.

Regulation (EEC) No 2092/91, the first implemented regulation of a major importing region, has played a major role in influencing the contents of regulations outside the EU. According to experts, “in many countries the need to gain access to the European market probably has been more influential in stimulating regulation than protecting consumers in the home market has been”.

At present there are two main sets of guideline, which have been internationally developed and negotiated – the **IFOAM Basic Standards for Organic Farming and Processing** and the **FAO/WHO Codex Alimentarius Commission Guidelines for the Production, Processing, Labeling and Marketing of Organically Produced Foods**. They provide guidance to governments on minimum requirements for organic production and certification, and facilitate inter-governmental recognition of mutual organic standards and certification systems and provide criteria for judgment of equivalence.

The working group is inclined to accept the advice by its international consultants that it would be best for Ukraine to regulate the sector using the **FAO/WHO Codex Alimentarius** as the necessary

blueprint. It is presumed that this step will provide a solution to the challenge in the field of harmonization and equivalence, and facilitate Ukrainian export to organic markets in the EU and USA.

3. Marketing

The lack of domestic marketing activities in Ukraine is evident, and an overall domestic market for organic products at the moment is in embryonic stage. At present, organic farming in Ukraine is fully export-oriented, and has been sustained by the large-scale production of organic grain for export to the EU countries that is concentrated in the hands of a few agro-investment companies. The small organic farmers have been trying to market their products to consumers mostly through conventional farmers' markets. By contrast to its European neighbors, in Ukraine there are no organic/healthy food shops or dedicated shelves in supermarkets and groceries. Processing structures also are not developed.

Trade people almost do not have an idea about certified organic products. Even some managers in this field in Kyiv understand 'healthy food' only as 'consumption of biologically active additions'.

Conversion from conventional to organic farming in Ukraine is seriously hindered by the present day situation in both marketing and advertising organic products. The shift in the development of organic sector could be expected from improvements in these areas, including intensive advertising by food chains and food processors that will introduce organic products to their assortments.

Consumer Awareness and Trends

Similarly to other Central and East European countries, personal health concern is gradually becoming an important purchasing factor for Ukrainian consumers. Likewise, environmental concern is less important, especially as Ukrainian consumers do not recognize the link between conventional agriculture and the general pollution of the environment. The consumers' purchasing power is gradually growing (although it's still quite limited), and preliminary surveys show that there is already a segment of consumers in Ukraine that are prepared to pay a price premium for healthy food.

To achieve consumer awareness of organic products and create a demand for them it is important to study the successful experience in leading EU nations and to launch an intensive promotional campaign through the media, emphasizing the human health merits of organic foods and linking them to positive attributes such as "well-being", "life expectancy", "traditional kitchen" and "folk culture".

Marketing Channels

Intensive marketing of organic products by Ukrainian food distribution and supermarket chains has a great potential for domestic organic market development and could create and, later, increase consumer demand. This would provide a positive public relations effect for the organic sector as a whole, and would essentially stimulate organic products consumption and, eventually, development of organic farming and processing in Ukraine. A major challenge is that, because of a limited variety of Ukrainian organic foodstuffs, supermarkets will also offer a wide range of imported organic brand names, creating a serious competition for Ukrainian producers.

Other marketing strategies could be learned from EU countries, in particular Austrian, experience. Organic farmers can join their efforts in co-operatives to market their products under common brand name/label to organic shops and restaurants, which can be their property. In processing co-operatives organic farmers can produce specific organic foodstuffs and market them to various retail traders. Cooperation between organic farmers and public or private kitchens, e.g. in hospitals, schools, etc. can be another way to market organic products.

It is also necessary to use and disseminate experience of clubs of organic production consumers, which are being set up in big cities, for instance in Kyiv. It would be possible to market organic products directly from farmers through them. It is also necessary to use the experience of other countries, for instance Netherlands, where farmers established processing of milk organically produced directly on their farms. Milk is processed for traditional local varieties of cheese and sold in their own small shops. Along with production and processing organic products, such activities could be combined with provision of services in green tourism. Of course it required significant funds, which is impossible in Ukraine without involvement of investments.

It is also possible to use other successful foreign examples in order to expand organic production marketing. Thus some time ago Netherlands helped Czech Republic in promotion of consumption of organic products as the most healthy food through creation of special restaurants, where cooks from Holland prepared meals from certified organic products. Cooperation of farmers is very important in the organization of organic production marketing and processing.

4. Public Associations, Training and Advisory Service

Organic Farming Associations

The first organic farming association in Ukraine, **the International Ukrainian-Swiss Public Association *Bio-Lan Ukraine***, was founded in 2003 and officially registered in 2004. Among its members there are small and middle-scale farmers, agricultural teachers, organic farming experts and other individual members. The establishment of the association has been induced and supported by the Swiss ***Eco-Lan*** technical assistance program. The association does not represent, however, the big organic farms, agro-investment and trading companies, private certification bodies and some other organic sector stakeholders.

Initiative on the creation of the Association of organic producers was also expressed in Rena Rayon of Odesa region. Several individual and large reformed farms with the support of the TACIS Project and Odesa Rural Advisory Service intend to transfer to organic farming and export certified organic products to neighboring countries near the Danube. Some of them are already at the stage of certification. In November 2004 managers of these farms participated in a study tour to Netherlands aimed at learning experience of functioning of the system of organic agricultural production from producers to consumers.

Another public association expressing interest in development of organic agriculture is the oldest and biggest farming association in Ukraine – ***The Association of Farmers and Land Owners of Ukraine*** (AFLOU), which organizes about 43,000 small (10 to 100 hectares) and middle-scale (100 to 1,000 hectares) private farms and about 600,000 land-owners who ventured to cultivate their land (2-5 hectares) themselves after the disbanding of the former collective farms. In January 2004 the association's Board established a committee to promote organic farming among its members and support them in conversion to organic methods. One of the basic problems is that the association does not have funds to employ qualified organic farming advisors. A possible solution could be that experienced organic farmers might provide advisory support to association members at specialized seminars, also providing them a chance to discuss organic farming problems and exchange their experience.

It is necessary to set up a Centre for stable agricultural production that would include relevant specialized consulting services and provide the whole range of services to potential organic producers, carry out marketing research, provide services to governmental structures in the development of

relevant legislation and state programmes. The Centre should also serve as an umbrella structure for different organizations involved in the organic sector. It should also fulfill the functions of coordination, lobbying, information provision, investor search etc.

In the framework of operating small international projects mainly funded by the Swiss Government it is practically impossible to solve the problem of the establishment of a full value organic sector in Ukraine. More substantial technical assistance from the international community, first of all from EU, USA and Canada is required.

Training and Advisory Service

At present the agricultural technical college in the town of Illintsi (Vinnytsia region), supported by the Swiss partners, offers a training program in organic farming. A few university schools, including the Agronomic Department of the National Agrarian University, are now considering the possibilities for introduction of organic farming curricula to teach their students.

On the basis of the National Agricultural University and Berezhany Agritechnical college two training seminars for farmers, representatives of science and education of Ukraine were held in 1998. Issues of certification and requirements to organic production, marketing and processing, organization of training and extension in the area of agricultural production were studied at the seminars with participation of Ukrainian and Swiss specialists. Representatives of some governmental institutions and non-governmental organizations participated as well.

According to the strategic plan adopted in March 2004, the *Coordination and Training Center of Agricultural Advisory Services (TCC)* plans together with *Agricultural Advisory Services* to offer to Ukrainian farmers advisory services in organic farming. However, it lacks personnel having appropriate qualification in organic agriculture. Therefore, there is an urgent need for a specific training program for advisors who will specialize in organic farming.

TCC provided support in the transfer to organic farming to several pilot farms in Poltava, Kyiv, Luhans'k and Odesa regions. Systematic dissemination of information on organic farming among advisory services, farmers, agricultural scientific and education institutions, government officials and interested foreign partners was organized. First of all it included information on standards, reviews, companies producing biochemicals and providing certification, market outlets, international cooperation etc.

Work on organization of internship of farmers and agricultural specialists on organic farms abroad has been started.

A study tour to Netherlands on the issues of organic production from producers to consumers was organized. Farmers, managers of large farms, including certified ones, representatives of research institutes and farms of UAAS, advisory services, and governmental bodies were among the participants of this study tour.

TCC in cooperation with its partners developed the State Tailored *Programme of Agricultural Advisory Activity*. It was passed to the Ministry of Agricultural Policy, Cabinet of Ministers and the Verkhovna Rada of Ukraine in December 2004. This Programme foresees services to agricultural producers including those on organic farming. Beside these services are treated as socially beneficial ones, which are to be funded from the state and local budgets.

An information and consultancy center on organic agricultural production was also set up at the Illintsi Agricultural College in the framework of the Swiss-Ukrainian Project “**Ekolan-Ukraine**”. But a limited number of specialists and general focus on farmers involved in the Project limits the provision of support to potential organic producers.

Thus, a serious problem hindering the development of organic farming in Ukraine is that farmers at present have no or very little access to qualified training and advisory services, as there is a serious lack of trainers and advisory staff.

5. A Need for Public-Private Partnership

The first multi-stakeholder meeting held in October 2003 (although with a very limited number of participants) proved very useful for establishing a participatory mechanism for developing public policy, setting standards and monitoring the organic sector in Ukraine. It would be very important to launch a permanent dialogue between governmental and non-governmental players to find solutions that will benefit producers and consumers of organic products.

An important reason for developing such a dialogue is the fact that Ukraine is now beginning the process of drafting its national regulations and developing relevant public policies. The working group is supposed to promulgate a first draft of the organic law towards the end of this year. Even after the law is adopted there will be a need to develop the operational rules for its implementation. In fact, the scope and the content of the law, implementing regulations and governmental policies may still greatly vary and can be negotiated by the interested players.

In this context, establishment of an umbrella organization, aiming to represent the interests of all organic stakeholders and to establish its position as the leading representative body for the organic industry, would be of great importance for the promotion of the organic sector in Ukraine, as well as for civil society development.

A public-private partnership, based on the above mentioned dialogue, could assist in bridging the different interests, establishing appropriate organic regulations and effective organic food control systems, and creating favorable conditions for an organic farming boom in Ukraine in general. For example, it is very important to create a fair environment conducive to small farmers’ entry to organic domestic and export markets, including low-cost inspection and certification schemes. Successful development of an organic sector in Ukraine will also require that training, advisory, certification, marketing and other activities should provide farmers and processors with necessary services and give the consumers expected food security and quality.

To this end, a multi-stakeholder forum where private sector activities are bridged with prospective governmental regulations and policies for organic agriculture could be an important next step.

In conclusion, the organic sector in Ukraine is highly promising and prospective, as it will capitalize on the country’s fertile soils, strong agricultural traditions, pro-quality food mentality, and the 48 million consumers market with increasing healthy-food concerns and growing purchasing power. Its success could also become an important contribution to Ukraine’s shift towards sustainable development.

Sources.

1. Author’s personal involvement (V.Vovk) in organic farming initiatives in Ukraine, in particular as a parliamentary consultant, a member of the working group on drafting organic sector regulations, a

board member of the *Bio-Lan Ukraine* association, and the deputy chairman of the organic committee of the *AFLOU*.

2. Author's personal involvement (M. Kapshtyk) in organic farming initiatives in Ukraine, in particular as a contact and responsible person on organic agriculture development in **Agricultural Advisory Services and Coordination and Training Centre of Agricultural Advisory Services (TCC)**, a consultant of the working group on drafting organic sector regulations and the member of the organic committee of the *AFLOU*.

3. Materials of the Ukrainian-Swiss seminar *Certification of Organic Agriculture in Ukraine: Present State, Perspectives, Strategies for the Future*, Kyiv, October 14, 2003.

4. Materials of the Ukrainian-Swiss seminar *Teaching and Training in Organic Agriculture: Models of Switzerland and Ukraine*, Kyiv, April 12, 1998.

5. Materials of the Ukrainian-American-Polish seminar *Organic Food. Modern Trends of Production and Marketing*, Lviv, March 31, 2004.

6. "The Organic Guarantee System. The need and strategy for harmonization and equivalence", an outcome publication from *The Conference on International Harmonization and Equivalence in Organic Agriculture* organized in February 2002 by the **IFOAM, FAO and UNCTAD**.

7. Country reports, in particular Austria, Germany, Denmark, Hungary, Poland and Czech Republic, on the *Organic-Europe* web-site maintained by the **Research Institute of Organic Agriculture FiBL**

8. H.Lusty, V.Berger. **Organic and Biological Agriculture in Ukraine: Principles for Farmers**. Prepared by Bern University of Agriculture (Switzerland) in cooperation with the National Agricultural University (Ukraine), Collikoffen, 2001