

nr 2 // May 2012

ecology **AND** farming

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Keep on learning!

Results in organic agriculture like high yields, low economic and environmental costs, high product quality and improved soil fertility can be good, but this is not always the case. Farmers, and others working in the organic industry, where ever they live, should always be focussed on how to improve their work. Farming, which involves producing food and maintaining soil fertility and the landscape, is a big responsibility for everybody involved. Worldwide, people are moving to the city and away from agriculture. There are less people on the land to produce food for the rest of the population. These farmers have to produce more, and at a better quality, often for lower prices. Organic producers aim to farm in a way that it is sustainable, in balance with nature and results in produce that meets quality market criteria. The successful farmers are learning farmers. Through networks of learning groups, together with researchers and consultants, they try to gain more knowledge, improve their work and introduce innovations. The same is true for people involved in processing, marketing, certification, research and training. As in all other businesses, you have to improve your work, otherwise your business (or your farm) will not be sustainable in the long run. Organic farming is by definition farming in progress, it is a process of development.

A recent large meta-study showed that, on average, crop yields on organic farms are 80 % of conventional yields. Where organic agriculture is combined with good agricultural practices, the results are good. My experience as a consultant and trainer in organic projects in many countries is that the organic production itself can be much better than before or the neighbours', due to training and information exchange. Nowadays there are around ten million people working in the organic industry. Organic agriculture has been expanding over the years and has had a huge impact on thinking about agriculture and environment, the use of agro-chemicals, the need to maintain soil fertility and communications between farmers and consumers. But good education in organic agriculture is needed to continue this progress. This applies to professionals, already working in the business, and to newcomers, students, young farmers and others. This issue of Ecology & Farming is about education and training in organic agriculture. It is the first attempt we know of to provide an overview. We hope to get a lot of reactions, and we will update our readers on these on our website and in the magazine. The organic industry should be an attractive field for young people who are looking for an interesting and meaningful job. And there will be plenty of new jobs in the organic sector in the coming years.

Peter Brul

// NEW META STUDY ON ORGANIC VS. CONVENTIONAL AGRICULTURE

(by Peter Brul)

Researchers at McGill University and the University of Minnesota, Canada did a large desk study on organic agriculture, the results of which were recently published in 'Nature'. Their conclusion: Overall, organic yields are 25% lower than conventional. The difference, however, varies widely across crop types and species.



Organic yields of legumes and perennials are much closer to those of conventional crops, yields of cereals and vegetables are much lower in organic farming. When best management practices are used for organic crops, overall yields are just 13% lower than conventional levels. "These results suggest that today's organic systems may nearly rival conventional yields in some cases -- with particular crop types, growing conditions and management practices -- but often they do not," the researchers write. Improvements in organic management techniques, or adoption of organic agriculture under environmental conditions where it performs best, may help close the yield gap, they suggest.

This is absolutely right but at the same time is a rather theoretical solution. Neither organic, nor conventional, agriculture are just one 'method'. There are huge differences between organic farmers. There is a difference between 'projects' - in the way they train farmers, develop conversion plans for farms and the frequency of visits by

experts. In many cases however, especially in tropical countries and in areas where it is not usual to work with consultants, a group of farmers with a commercially interesting cash crop who work without any (chemical) inputs are certified, to be able to sell for a premium price. Nothing or nearly nothing changes in agricultural practice. These can also be the poorest farmers in a region who did not have the money to buy (chemical) inputs. They are sometimes the target group for development agencies, which use the tool of organic and Fair Trade certification to help them improve their income. However, their agricultural results don't tell so much about the potential of organic farming in these circumstances, maybe only about the marketing aspects. But that was not the subject of the study.

The study is a typical desk-study. The average of 25% lower yields is contrasted to intensive farming systems, compared against high input conventional production systems. It is a fantastic result when an organic vegetable grower in the Netherlands has just 25% lower yields than his conventional neighbour, whose productivity is among the highest in the world. But most of the world's agriculture is not high input, and my experience is that, in such situations, organic farming can lead to higher yields than conventional practice.

The study indicates that organically fertilized systems might require higher nitrogen inputs to achieve high yields as organic nitrogen is less readily available to crops. In some cases, they claim

// FIRST BOOK ON ORGANIC CROP BREEDING RECENTLY PUBLISHED

Organic crop breeding is a rapidly emerging field.

That is why the publisher Wiley-Blackwell has invited Edith Lammerts van Bueren, Professor of Organic Plant Breeding at Wageningen University and attached to the Louis Bolk Institute in the Netherlands, to compile a book on the subject for crop breeders, geneticists, crop science professionals, researchers and students. She did so with Jim Myers, Professor of Plant Breeding at Oregon State University in the USA. Altogether 50 authors share their knowledge, providing a thorough review of the latest attempts by crop breeders and scientists to develop improved varieties for organic production. The book

opens with chapters that look at the values of organic agriculture and the implications for organic breeding. There are also chapters on specific valuable traits such as weed suppression, nutrient efficiency, pest and disease resistance, genetic diversity, participatory approaches and law and policy issues. The second part of the book is a series of case studies of specific crops, looking at breeding efforts currently underway around the world ranging from wheat, maize, rice, soybean, faba bean, potato, tomato, brassicas and onions. See www.wiley.com. ISBN 978-0-470-95858-2, hardcover, 312 pages.

that organic farmers may benefit by making limited use of chemical fertilizers rather than relying just on manure to supply nitrogen to their crops” But Seufert also says. “At the same time, conventional agriculture can learn from successful organic systems and implement practices that have shown environmental benefits, such as increased crop diversity and use of crop residues.”

This is to some extent a strange discussion, The organic farmers with poor results, are in general also not using any inputs, often have no crop diversity and are not really recycling, making compost, etc. Using chemical fertilizers would give higher yields, but then they would lose the advantage of the premium for organic products. It would be much better to include training on improved farming (good agricultural practice), but that is not the focus of these farmers and unfortunately often also not of the development agencies that support these farmers.

Yields are only part of a set of economic, social and environmental factors that should be considered when gauging the benefits of different farming systems, which the researchers recognize: “maybe people are asking the wrong question,” says Prof Ramankutty. “Instead of asking if food is organically grown, maybe we should be asking if it’s sustainably grown.” It is a challenge for the organic movement to show that this is not the question. The answer is to expand (on farm) research, education and training in the practice of organic farming, to increase yields and other benefits.



Conventional agriculture can learn from successful organic systems and implement practices that have shown environmental benefits, such as increased crop diversity and use of crop residues.

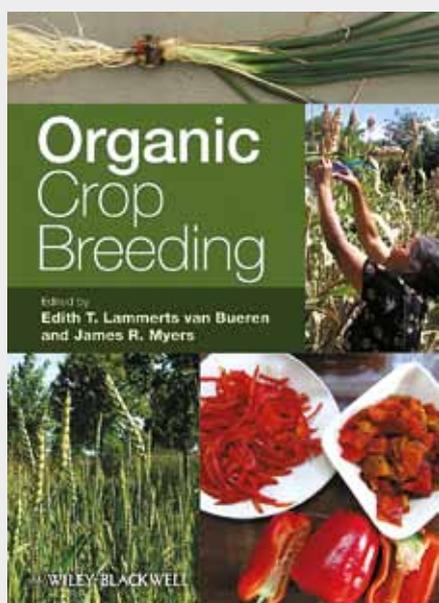
IFOAM’s official position on this topic is available on:
www.ifoam.org/press/positions/index.php

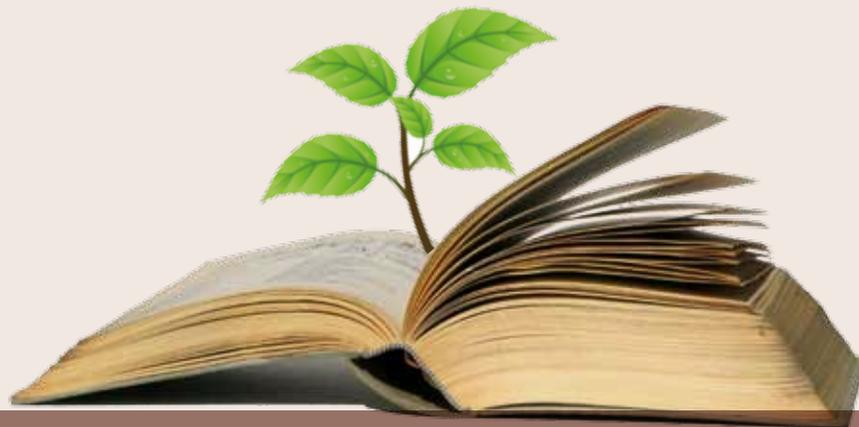
// THE MONSANTO METHOD

Monsanto, the massive biotechnology company blamed for contributing to the dwindling bee population, has bought up one of the leading organizations involved in research into bee collapse. The company’s genetically modified corn may be devastating the bee population, and Monsanto is under serious fire for their role in the downfall of these vital insects. Monsanto’s motives for buying Beelogics, one of the largest bee research firms on the planet, in September 2011 are quite obvious. At this time the correlation between Monsanto’s GM crops and the bee decline had not been well-explored in the mainstream, and had been hardly touched upon until Polish officials addressed the serious concern. Owning a major organization that focuses on bee collapse and is recognized by the USDA for their mission statement of “restoring bee health and protecting the future of insect pollination” could be very advantageous for Monsanto.

Beelogics’ company information states that the primary goal of the firm is to study the very collapse disorder that is thought to be a result — at least in part — of Monsanto’s own creations. Their website states: “While its primary goal is to control the Colony Collapse Disorder (CCD) and Israeli Acute Paralysis Virus (IAPV) infection crises, Beelogics’ mission is to become the guardian of bee health worldwide. It appears that when Monsanto cannot answer for their environmental devastation, they buy up a company that could potentially be their ‘experts’ and help them deny any link between their crops and bee decline.

Read more: <http://naturalsociety.com/monsanto-bee-collapse-buys-bee-research-firm/#ixzz1swcD6H4T>





BY URS NIGGLI

Fascinating organic careers

Legend has it that organic agriculture was invented and propelled by farmers. Yet, one of the sources of innovation which shouldn't be underestimated has been young people studying (conventional) agriculture at universities and colleges.

There were rebellions in the 1970s that raised themes that were then quite unfamiliar: ecology, animal welfare, healthy nutrition and landscape preservation. There was no specific curriculum for these topics in schools of agriculture, so students invited organic farmers to come and speak at meetings and courses, often to the dismay of professors. The critical students were especially impressed when such farmers rebuked professors for asking the wrong questions or giving the wrong answers. They would provoke classical plant nutritionists with statements such as “we do not nourish crops, we feed soil microorganisms” Today, soil food webs are the basis of modern plant nutrition taught at universities. In 1976 students organized a then-famous conference at the University of Natural Resources and Life Sciences in Vienna in 1976 called “The Earthworm”. It

marked the beginning of the organic movement in Austria, which has now become a global organic success story with 20% of its land managed organically.

Many of these early academic players became successful business people and are still driving the organic sector forward. Some are professors of soil science, agroecology and organic farming. Others operate certification schemes or manage organic farmers' associations or work in public administrations promoting organic farming or agroecological policy. And some of those committed people are reshaping agricultural research at private institutes such as Rodale, FiBL, the Louis Bolk Institute, the Centre for Organic Research (formerly Elm Farm) or the Ludwig-Boltzmann Institute, Vienna. Over the years organic agriculture has gradually become established in the education of agronomists, environmental scientists, farm advisors and farmers, either as distinct courses or as optional modules. Although European countries are leading in this respect, knowledge about organic farming systems has become a prerequisite in agricultural and environmental curricula globally.

Outstanding examples of this include the Kassel-Witzenhausen University with its Faculty of Organic Agricultural Sciences or, at the level of vocational education for farmers, the schools at Schlägl (Austria), Landshut and Kleve (both Germany) and Schwand (Switzerland) all of which have a strong or exclusive focus on organic farming. When the Haut Ecole d'Ingenieurs in Geneva focussed their Bachelor's Degree in Horticulture solely on organic methods, their simple but convincing rationale was that organic horticulture is more complex, challenging and knowledge intensive than conventional horticulture. A student who can manage organic systems can easily cope with all other farming approaches and techniques. Learn what challenges you and not what is repetitive!

The fascinating thing about organic farming at both university and vocational level is that students get trained in the interconnectedness of all disciplines. Although interdisciplinarity has supposedly been the new official paradigm of agricultural research and education for decades, in reality the opposite is true and knowledge has become incrementally fragmented. Research and education in organic food and farming systems are living expressions of interdisciplinarity. Another amazing thing is that the food chain integration is always crucial for the understanding of organic agriculture. The earthworm in the soil is part of the information which is communicated to the consumers buying organic bread from the shelf. Typically stakeholders involved in or affected by food production play a role in the organic farming courses: farmers share their experience

with the students, nature conservation officials discuss landscape development plans with the classes and food business people teach marketing.

Organic specialists are sought-after in agriculture and in the food business. They find their engagement and passion as knowledgeable farmers, as teachers, advisors and scientists in a fast growing sector with an increasing societal clout or as managers and entrepreneurs in the booming green economy and ethical trade sectors.

One of the strengths of organic specialists is that they are generalists. In modern science, the term generalist has a negative connotation. Quite wrongly, as generalists see and strive for solutions from a narrow perspective while specialists prefer to analyse problems from a broader one. ■

Urs Niggli is director of the Research Institute of Organic Agriculture (FiBL), Switzerland: www.fibl.org.



ORGANIC AGRICULTURE IS WORTH STUDYING BECAUSE IT IS MORE COMPLEX, CHALLENGING AND KNOWLEDGE INTENSIVE THAN CONVENTIONAL HORTICULTURE



BY CONRAD THIMM

Farmers and consultants learn from practice

Training and Education

Inquiring into what matters most in organic farming, Conrad Thimm identifies six essentials that need to be taught in organic training and education: continuous learning, understanding the ecology of the location, hands-on research and development, the wider socio-economic and political picture, collaboration and a holistic view.

Learning from nature is a good place to start from in organic farming. Farming, though, is not just about nature but also about constantly facing all sorts of different challenges and changes. The ability to navigate change is becoming increasingly important for all organizations and people. This also applies in organic farming which, contrary to the imagination of some idealistic lay people, is also constantly changing: adapting to climate change, technological and societal changes and so on. Continuous learning is a prerequisite for success in organic farming and needs to be taught by consultants, who are close to both farmers and traders and aware of these changes.

Understanding the ecology of the location

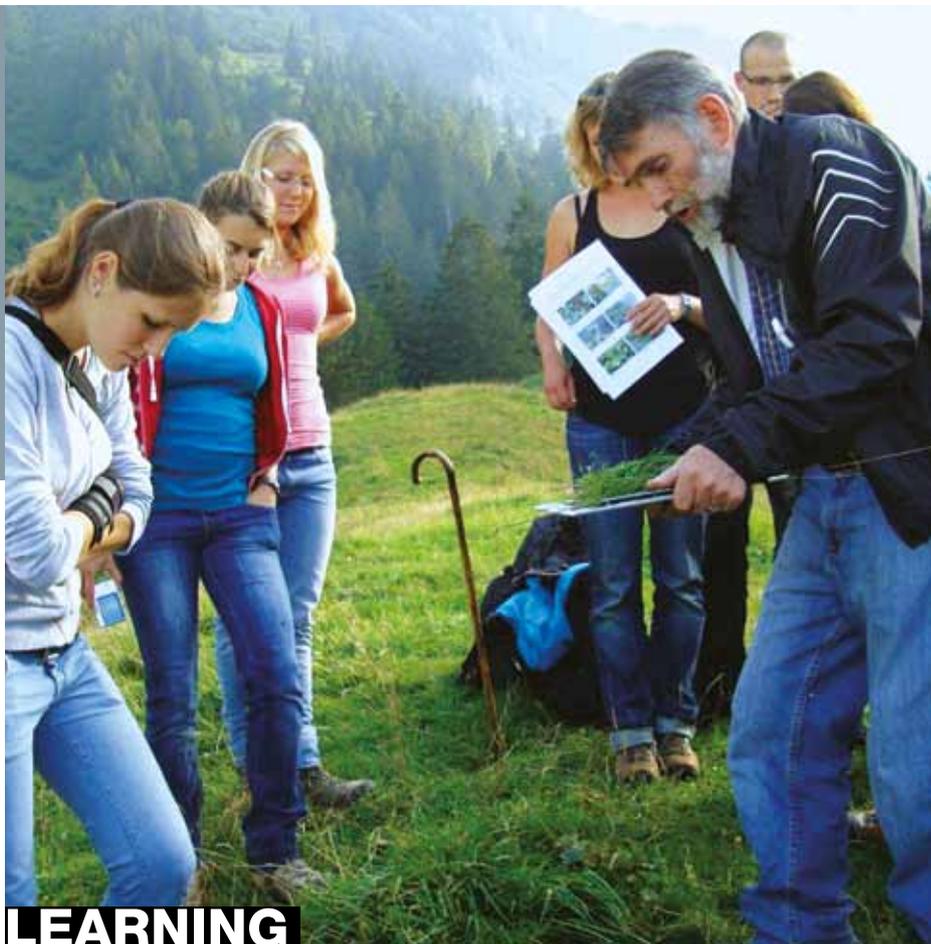
Organic farming works with nature, i.e. with the ecological cycles of a location. These have to be understood for any given location. They run somewhat deeper than just looking at healthy soils,

plants, animals and human beings. The bottlenecks for growth in a specific place have to be identified and tackled. Each location has different climates, different soils etc., and organic farming needs to be appropriate for these place-specific conditions. What is right in a humid area, where leaching may be a challenge, may be totally wrong in a dry area with salinization. This seems obvious, yet I still see room everywhere for improvement in this respect.

Hands-on research and development

Organic farming can't be taught like a recipe. It involves applying, testing and developing the concepts of appropriate ecology in daily real-life situations. Universities and formal research stations can be of help here, yet the more "scientific" their standards, the more they focus on analytical specialization taking them further away from the complexities of working in real life, which is exactly what farmers have to do every day. Farmers

Organic farming involves understanding the ecology of the location



LEARNING TO NAVIGATE CHANGE IS PROBABLY THE ULTIMATE CHALLENGE FOR TRAINING AND EDUCATION.

and consultants are best equipped to do the hands-on research and development for organic farming themselves. Being in charge of their own needs they can also ask scientists questions. This approach holds more promise than scientists setting the agenda and telling organic farmers what to do. The English saying “experts on tap, not on top” expresses this very well.

The wider socio-economic and political picture

Like all farming, organic farming takes place in a societal context. This may or may not be favourable for organic farming but has to be taken as a given. While a farmer’s organization may focus on advocating for better policies and farmers may support this, the farmer’s basis of existence is the success of her own farm under existing conditions. As these conditions are changing, it is essential that farmers and consultants are aware of what is happening in the wider picture. Sometimes

the rules might be completely changed, by governments or by technological or market changes. This has to be taken into account.

Collaboration

The organic sector often claims a high level of collaboration among organic farmers, with consumers, or along the value chain. But the reality is not always that bright and improving competence in collaboration is another essential for training in organic farming. And, contrary to many beliefs, training in collaboration is not only essential, but also possible, even for

farmers, as long as they are willing and if there is a trainer who really knows the ways of participatory work and walks her talk.

A holistic view

Farming is a complex challenge and organic farming often even more so. It is not only about ecology and technology, economy and sociology but also about how one leads one’s life; one’s purpose and values, beliefs and visions, and community and self-management. In traditional, relatively stable societies these issues were taken care of by culture and religion. In our increasingly faster changing societies more and more corporations and organizations recognize the need to focus on holistic organizational and personal development if they are to be successful. Learning to navigate change is probably the ultimate challenge for training and education. ■

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The road to Rio

An important milestone on the road to Rio+20 was recently reached. The Zero Draft of the Rio+20 outcome document was made public, after an extensive consultation process in which 677 submissions were received, including one from IFOAM.





BY ROBERT JORDAN

Although 100 member states, 74 UN agencies and other IGOs (inter-governmental organizations) made submissions, 73% of submissions were made by civil society. The Zero Draft therefore draws predominately upon content provided by civil society organizations (CSOs) and, as such, the Rio+20 agenda has been significantly shaped by the priorities of organizations like IFOAM. Rio+20 will take place in Rio de Janeiro, Brazil from the 20th to 22nd June. It will be preceded by a final preparatory meeting and four days of thematic roundtable debates on the eight priority themes. One of the priority themes will be 'Poverty eradication, food and nutritional security'. In recent years, international processes, such as the UN Climate Change negotiations, have proven to be excellent platforms for IFOAM to strengthen relationships with key stakeholders and start new collaborations with its members, UN agencies, the African Union, donors, other NGOs and governments (including those of Malawi, Kenya, Uganda and Switzerland).

The Rio+20 process provides IFOAM with a big stage where it can further consolidate its advocacy activities and networks. There will also be a parallel public meeting for non-government groups and individuals to debate issues and make their views known. IFOAM will be active in both of these arenas, cooperating with local and international members and working with organizations as diverse as the FAO, the World Farmers Organization and UNCCD.

IFOAM have been working jointly in advocacy with Biovision to ensure that sustainable agriculture and food security were in the Zero Draft. Food Security is listed as the first priority in the 'Framework for Action' section of the negotiating documents. The Right to Food, prioritizing increased investment in local food production, paying special attention to women, smallholders, youth and indigenous farmers and a commitment to ensuring proper nutrition for all are all included. And, in a coup for IFOAM's advocacy efforts, organic production systems are specifically mentioned under the 'Green jobs and social inclusion' priority theme. 'Food security and sustainable agriculture' is listed as one of the proposed new Sustainable Development Goals. The

safeguarding of soil resources and the 'encouragement of scientific studies and initiatives aimed at raising awareness of the economic benefits of sustainable land management policies that achieve healthy and productive land and soil' are also listed as priorities for action.

The Zero Draft states that sustainable development requires the full engagement of civil society, including farmers, and they must be enabled to incorporate their knowledge and practical know-how into national and local policy making. This recognition by governments of the important role that CSOs have to play in making sustainable development happen will hopefully usher in a new era of much greater engagement and collaboration with governments.

The draft outcome document calls for a green economy that is people-centred and inclusive, providing opportunities and benefits for all citizens and countries. It recognizes that building green economies will require new investments, new skills formation, technology development, transfer and access and capacity building and acknowledges the particular need to provide support to developing countries. It also proposes 'innovative instruments of finance for building green economies' that could potentially reward organic farmers for good environmental stewardship. The pledge to 'gradually eliminate subsidies that are incompatible with sustainable development' could also help to create a more level playing field for organic farmers by reducing subsidies that favour industrial agriculture.

Also of strategic significance to IFOAM is the proposed reform of the institutional framework for sustainable development. The Zero Draft proposes strengthening the environmental pillar of sustainable development by either increasing the capacity of UNEP or by establishing a specialized UN agency for the environment, based on UNEP, with a revised and strengthened mandate that will give it equal footing with other specialized agencies, such as the FAO. IFOAM currently represents the global farmers' constituency on the Major Groups Facilitating Committee at UNEP – a role that could have added significance post-Rio.



'THE FUTURE BELONGS TO THE ORGANIZED'!

Next steps

IFOAM will be working with partners between now and Rio to strengthen the negotiating text on food security and sustainable agriculture. As part of this process IFOAM held an event at the BioFach Congress in February: 'Rio+20 – Time to Act: Organic at Rio+20'. This event, jointly organized by IFOAM, Vandana Shiva's Navdanya International, UNCTAD, FAO and Biovision was a follow-up to the side event held at the UN DPI NGO conference in Bonn last September and discussed strategic priorities for the thematic debates and negotiations in Rio. Other activities have included lobbying at the preparatory meetings in New York in March.

In anticipation of a more pro-active and collaborative future IFOAM brought together leading development practitioners from the organic movement at another pre-Rio event at the BioFach Congress. The event: 'Addressing Hunger – What Can We Do?'

explored how technical and policy expertise from within the organic movement can be systematically linked with agencies such as the World Food Programme (WFP), governments and other stakeholders in developing countries in order to help address food insecurity and assist the transition to green economies and resilient livelihoods.

It is hoped that Rio+20 will provide the conditions to unleash the creative force of civil society. It is therefore important that IFOAM's 750 member organizations, spread across 115 countries begin to position themselves to benefit from a post-Rio political environment that may well be more open to organic agriculture. As one of our advocacy partners at a recent IFOAM side event at CoP17 in Durban put it; 'the future belongs to the organized'! ■

Visit www.uncsd2012.org for a copy of the Zero Draft version of the Rio+20 outcome document.



BY PETER BRUL

Calculating organic employment

The growth of jobs in the organic sector

For some years FiBL and IFOAM have been publishing reliable figures about the number of organic farms and organic acreage in most countries. But there have been few studies of the number of people who work on organic farms or in other parts of the organic sector. This article seeks to fill this gap.

This overview is based on the annual statistics for organic farms, together with some cases where more is known about the number of people involved in the entire food chain. This gives a first indication of the possibilities for young people to work in this field.

Farming

Data on certified organic agriculture is now available from 160 countries. It shows that there are (at least) 1.6 million certified producers, working some 37 million hectares (2010 figures from FiBL and IFOAM). According to the consultancy GroLink there are around 2 million certified organic producers nowadays. Around one third of these organic farmers are in Africa and their number is growing fast. By the end of 2010 there were at least 540,000 certified organic farms in Africa. In general these are small farms, that provide work to an average of between 4- 6 people per farm. That means that there are around 2.5 million people working in organic farming in Africa. Research has shown that organic farms in Africa employ and provide an income to 25% more people than conventional farms. So, organic agriculture in Africa has probably already created more than 750,000 extra jobs. In Asia and many countries in Latin America one also finds many small organic farms, which are more labour intensive. Europe occupies a middle position in this. The

average number of people working on Europe's organic farms is 3.5. In 2010 there were almost 280,000 organic farms in Europe and an estimated organic agriculture workforce of 0.9 to 1 million. In Australia, New Zealand, Argentina, the USA and Canada the average size of the farms is much larger and the work force is relatively low. Based on these estimations, it can be assumed that worldwide there are six to seven million people working on organic farms (see Table 1).

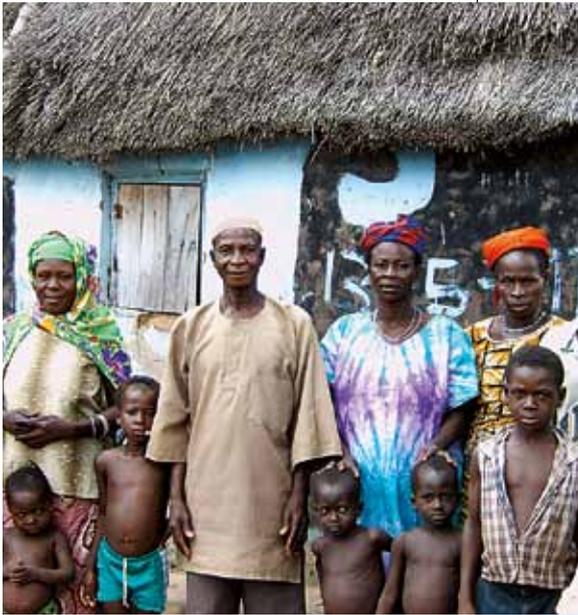
According to the report 'Works' from the University of Essex Organics Dept., organic agriculture in the United Kingdom offers on average 32% more jobs per farm than a comparable conventional production. Organic farming also attracts more young people and more newcomers to the agricultural sector. The University also looked at opportunities for conventional farms to increase employment - for example by selling local food, but comes to the conclusion that 81% of the extra employment stems from an organic way of working. Of each 3.08 jobs on organic farms 2.5 jobs were

The biggest organic employer worldwide

in the organic sector is the American retailer Whole Foods. The company has more than 350 retail and non-retail locations in the USA, Canada

and UK, and employs 65,000 people. The team members have chosen Whole Foods as one of FORTUNE® magazine’s “100 Best (big) Companies to Work For” for the last 15 years. FORTUNE notes that one of the reasons why Whole Foods repeatedly makes the list is its equitable pay structure; the salaries of executives are capped at 19 times the average full-time salary. Whole Foods also made FORTUNE’s “Most Diverse” list — with a workforce made up of 44% women and 43% minorities — along with the “Best Perks” list for offering gym membership discounts, compressed workweeks and gay-friendly policies and benefits.

Team Members also receive 100% paid health care premiums, placing Whole Foods on high on the list of companies with the best health care benefits in the USA. Although the company is quite exceptional in size for the organic industry, the pleasure of working there is typical for the sector. One of the things I have noticed working as a consultant for farmers, traders, the processing industry and the retail sector in very many countries is that people working in organic farming and in the organic movement generally really enjoy their work. It’s not just a case of numbers but also of job satisfaction.



WORLDWIDE THERE ARE 10 MILLION PEOPLE WORKING IN THE ORGANIC INDUSTRY, OF WHOM 7 MILLION WORK ON ORGANIC FARMS



directly linked to agricultural activities and production. The remaining 0.58 were related to on-farm processing and direct sales to customers through a farm store.

In the Netherlands, less than a quarter of organic farmers are younger than 45 years and five percent are over 65 years old. Many will be looking for succession in the coming 10 years.

In many European countries the organic farmers from the baby boom generation (born in the ten years after the second World War) will stop working in the coming years, creating space for thousands of young people who would like to work in organic agriculture.

Jobs in the entire organic industry

Farming is the basis of the organic production chains, but there are many other links in the chain: trade, processing, retail and services such as research, consultancy, inspection, certification and organizational management. In general these are mostly labour intensive. In 2011, the size of the global organic market was more than 60 billion US dollars.

There are some employment figures available from Germany. The number of employees in the German organic industry was estimated at around 180,000 by the end of 2009, according to a survey by the agency Harting & Tovar (done in co-operation with the PressForum Bio-

Branche). Considering the growth in production and the market this might now be around 200,000.

The number of employees in the 50 or so companies participating in the survey almost doubled in the period from 1993 to 2003. The tendency in the following six years was more or less the same. The survey showed that, in 2004, 30,000 people were working on organic farms, 80,000 in processing and 40,000 in wholesale and retail, a total of 150,000 workers. In 2009 there were more than 180,000, and in 2012 that might be more than 200,000. The organic market in Germany was worth 6.6 billion euro in 2011, with a growth rate of 11 % com-

Table 1:

Number of organic farms per continent 2010

(FIBL/IFOAM 2012) and estimations of people working on the farms and in the entire industry

CONTINENT	FARMS	FARM WORKERS (x 10,000)	INDUSTRY WORKERS (x 10,000)
Africa	542,839	250	300
Asia	460,762	200	250
Europe	277,362	98	200
Latin America	272,232	100	120
Northern America	16,870	6	60
Oceania	8,483	2	20
Total	1,578,407	650	950

THE SWITCH TO ORGANIC FARMING HAS CREATED MORE THAN 750,000 EXTRA JOBS

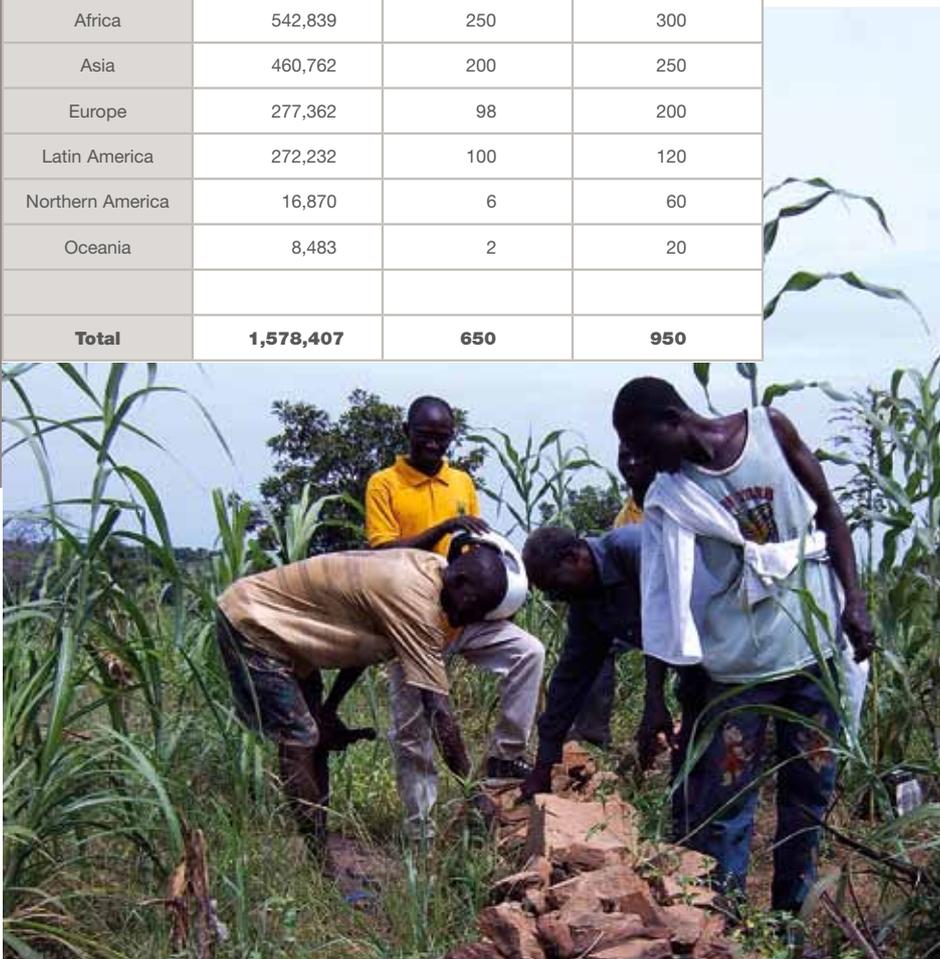


Table 2:

Organic jobs in the Netherlands

This figure was around 10,000 in 2006, and so has shown an increase of 60 % in 5 years.



DESCRIPTION	AMOUNT IN?
1,600 farms x average 3.5 persons	5,600
1,800 companies in processing & trade	7,300
250 health food and 230 farm shops	3,000
(>3000 supermarkets selling organic products)	-
Research (Louis Bolk Institute, Wageningen University Research- WUR)	60
Certification (SKAL)	34
Bionext (the umbrella organization)	20
Education (Warmonderhof, WUR, Kraaybeekerhof)	30
Consultants, banking, others services	50

The case of the Netherlands

According to my own analysis of the situation in the Netherlands, this small country has

around 16,000 people working in the organic industry, not including those people that work in supermarkets. The Dutch domestic market is worth around 750 million euro, exports worth around 550 million euro, while imports account for 300 million euro. Table 1 shows an estimate of the actual situation in the Netherlands:

Based on the annual farm statistics from FiBL and IFOAM and the numbers from Germany and the Netherlands for other parts of the sector, we can estimate that today around 2 million people will be working in the European organic sector. Worldwide this might be around 10 million people (see table 1).



pared with 2010. According to BÖLW, the German organic umbrella organization, the German organic sector creates 20,000 jobs per year. Organic farming in Germany requires 35-60 % more labour than conventional farming, due to the production methods, more diversity and smaller scale of activities. This continuous growth means that trainees have good prospects of finding an attractive job in the organic industry after their training.

Research, education, certification and advisory services.

The growing organic movement also

provides needs more and more opportunities for organizational management, research, consultancy, inspection, certification, training and education. According to The Organic Standard there are around 12,000 (+/- 2,000) people worldwide working in 540 organizations in organic inspection and certification, with a few international certifiers such as BCS, IMO, and Ecocert, with more than 250 employees.

There are more than 100 universities and institutes involved in research in organic farming. Some are entirely dedicated to organic approaches, such as FiBL,

the Rodale Institute and the Organic Research Centre (formerly Elm Farm). There is an organization specifically for organic researchers; the International Society of Organic Agriculture Research (www.isofar.org). Some universities offer Bachelors and Masters degrees and PhDs. in organic agriculture. Research institutes and consultancies offer more practical trainings for people already working in the organic industry or interested in doing so. It is estimated that around 3,000 people working on an academic level, in education, training and consultancy on organic agriculture. ■

BY AMANDA PEARSON

Linking organic famers and volunteers

WWOOF

Anyone looking to gain practical, on the ground experience of organic or biodynamic farming or permaculture and wanting to add some “colour” to their CV should give some serious thought to World Wide Opportunities on Organic Farming (WWOOF)

This grass roots movement started 40 years ago in the UK when a London secretary, Sue Coppard, eager to get out into the countryside at the weekend - but lacking the necessary funds - came up with a bright idea. Aware that the organic farms she longed to visit often required an extra pair of hands she wondered whether she could help out in return for some food and a bed for the night. A farm willing to host a trial weekend was found – as well as several other helpers – and WWOOF was born!

Since that day the concept of WWOOF-ing has spread far and wide. National groups in 50 countries around the globe currently provide almost 12,000 farms with 80,000 enthusiastic volunteer helpers.

The idea is a simple one – an interested party subscribes to the national WWOOF group in the country where they live (or wish to visit). The scheme is open to everyone aged 18+ (younger in some coun-

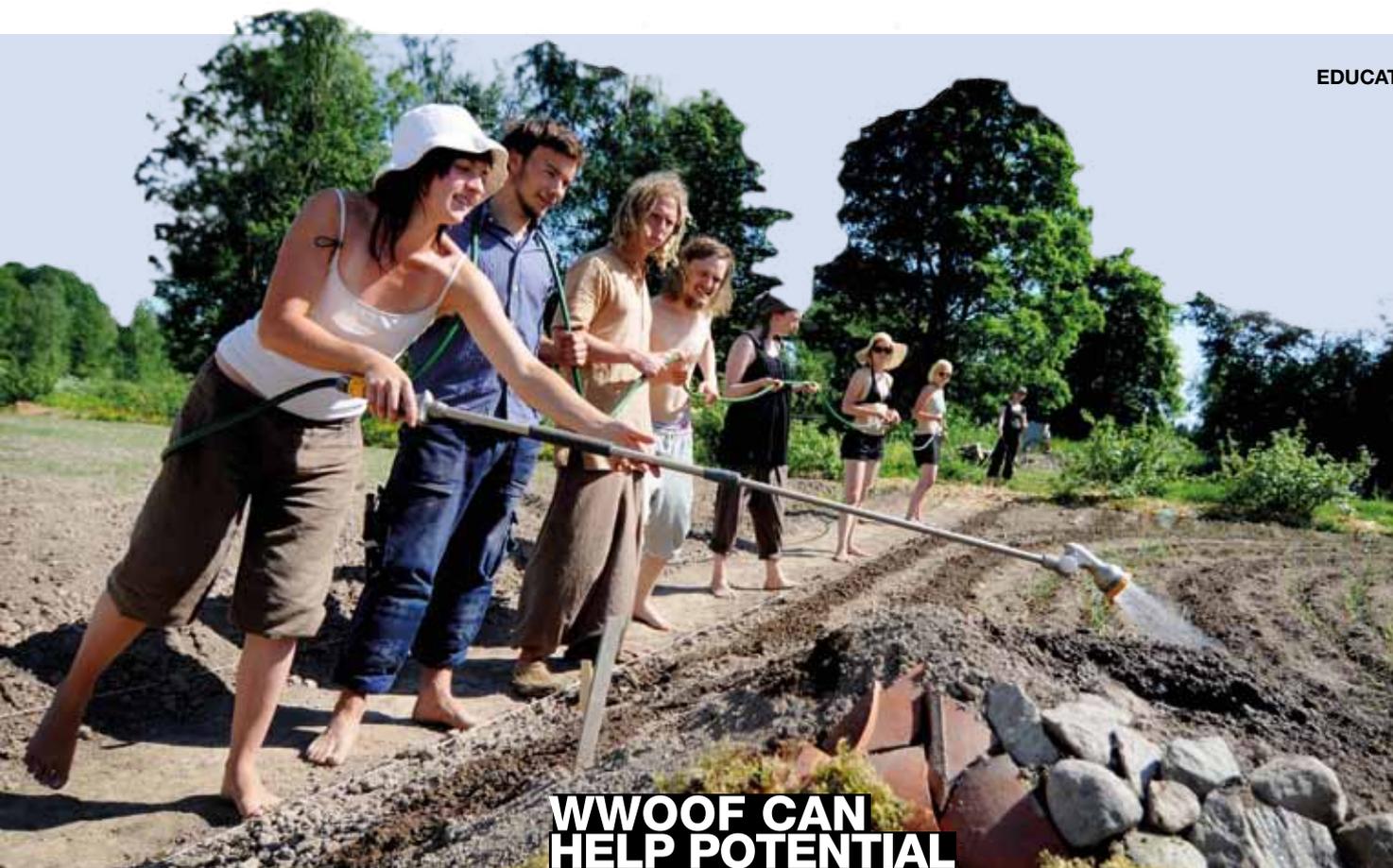
Table 1:
Number of requests received by hosts in Jan/Feb 2012

COUNTRY	HOSTS	REQUESTS	CONTACTS PER HOST
Thailand	15	335	22
Morocco	12	223	19
Indonesia	7	88	13
Croatia	7	70	10
Iceland	7	67	10
Malaysia	11	82	7
Slovenia	10	69	7
Holland	22	105	5
Norway	60	243	4
Finland	23	92	4
Belgium	28	108	4
Jordan	4	14	3,5
South Africa	33	99	3
Kenya	48	22	,45

tries) and there are no entry requirements other than being reasonably physically fit. Once a subscription fee has been paid (generally less than \$50) the volunteer is able to access a list of host farms willing to open their doors and to share their skills with “amateurs”.

Typically most volunteers (or WWOOFers as they are known) help out on the farm for 4-6 hours per day in return for food

and accommodation. Some will visit for a weekend, others for a week or two, a few may stay on for several months (or, very rarely, years!). Each experience is unique and tailored to meet the needs of the host farm and volunteer who arrange everything directly with each another. There are slight variations in the experience from country to country out of respect for local culture, laws or traditions.



WWOOF CAN HELP POTENTIAL NEW YOUNG FARMERS AND GROWERS DISCERN THEIR NEXT STEPS

The benefits of this simple exchange are multiple and complex. Both parties get some basic needs met: either help on the farm or a place to stay. Beyond that WWOOF can help potential new young farmers and growers discern their next steps. Visiting volunteers can share good practices they have seen elsewhere with their host. In addition to the practicalities of farming, WWOOF also provides a cultural exchange and widens the horizons of all involved. For the host farmer trapped on his farm by milking schedules or harvesting regimes the scheme brings the world into their parlour, whilst volunteers get to experience real life in the countryside or, if travelling abroad, taste the real thing rather than a sanitized tourist board version. As a result new friendships, sometimes even marriages and babies have been known! For some WWOOF is a life changing experience, introducing them to new ways of being and of seeing the world.

So where should a potential WWOOFer start? Visiting www.wwoof.org or www.wwoofinternational.org will give a flavour

of what is possible. The key is to focus on the country or countries you wish to visit and then follow links to the relevant national website.

However a plea must be made here. Your own country needs you too! WWOOF started as 'Working Weekend on Organic Farms'; as travel has become cheaper and the possibility of visiting remote places has become more real for larger numbers of people, the acronym was changed to World Wide Opportunities on Organic Farms. This change contains an inherent contradiction. As supporters of organic farming – are we not keen to reduce our carbon footprint? Is it really necessary to travel half way round the world to learn about these things? Before booking that flight – take a look at the opportunities in your own back yard. If you do choose to travel abroad – make sure you have some basic knowledge of the language in the country you are visit-

ing. You want to make sure you understand what you are being asked to do! A WWOOFER who pulls out the carrots and leaves the weeds to spread is unlikely to be welcome to stay for very long. Also you could consider visiting some of the less popular countries. The table compares and contrasts the number of contacts received by hosts in some countries. Applying to hosts in less popular countries will give you a greater likelihood of success in securing a stay with the first or second host you contact.

If you are already a farmer and think you would benefit from being part of this network – just get in touch with the WWOOF group in your country. Joining usually just involves filling in a simple form. If you find that there is no WWOOF group operating in your country – get in touch with us. We are always looking for co-ordinators to set up and run new national groups. This article could be the start of a whole new chapter in your life... ■

Amanda Pearson
Development Co-ordinator www.WWOOF.org

BY MACHTELD HUBER

**Changing scientific ideas
about how to define health**

WHAT IS health

In September last year I attended a large food research conference, the NuGO week in Wageningen, the Netherlands. I had the honour of being invited to give a presentation in the opening session, a summary of an article of mine, 'How should we define health?' that had recently been published in the British Medical Journal.



My work on this theme was inspired by frustration that arose from my previous research project 'Is Organic Healthier?' At the end of this project we could not conclude which of several groups of chickens was healthier. All the animals were healthy, but physiologically they showed many differences. The main characteristics of the young animals reared on organic feed were a somewhat lower weight, a stronger immune reactivity and a faster recovery from a stop in growth after we had made them a little 'ill' with an immune challenge. However,

these characteristics could not be scientifically interpreted as 'healthier'. 'Health' it appears is not scientifically defined and has not been a topic for science, in the way that illness has been.

After the disappointing end of the chicken project, I started to work on the concept of health, and this resulted in a proposal, supported by a core group of medical professionals, scientists and policy makers, to describe health as 'the ability to adapt and to self manage'. This is clearly a functional definition and not the description of an end-state like, for example, the WHO definition of health of 1948 which says 'health is a state of complete physical, mental and social well being and not merely the absence of disease'. The WHO has not yet accepted our proposal and changed its definition, but we have received a lot of support and there is growing support for making such a change. At this moment I am working with others on operationalizing this new concept for research and other purposes.

What impressed me - and this is the reason I describe it here - is that the scientific audience at the NuGO conference reacted very positively to the proposed description of health. These scientists have been working for many years in



AFTER WORKING WITH CHICKENS I CAME TO ASK 'HOW DO WE DEFINE HEALTH?'

networks with large budgets and state-of-the-art equipment, researching the health effects of nutrition. The hoped-for 'golden bullets', nutrients which could be added to create functional foods to improve health, have never been found! Moreover, scientists are coming to the conclusion that nutrients in the body interact with each other in very complex ways. So, the addition of isolated vitamins or other micronutrients to food might well disturb these balances. After spending much research money, there is growing scientific recognition that whole food, rich in original nutrients and fibres, serves health best. And these experienced researchers embrace the idea of health as 'resilience' or 'elasticity' in dealing with life's ongoing challenges, be they physical or emotional.

This coincides exactly with the hypothesis of what organic food (of good quality) offers the consumer: strengthening resilience and elasticity and thus improving and maintaining health. This hypothesis of course requires much research to be sci-

entifically proven, but the chickens gave us a first indication of this idea and more of our research is moving in this direction. Organic food was not a topic at the NuGO conference - that is still a bridge too far. But the tendencies in thinking in conventional nutritional research are moving in this direction. It will be interesting to see how it develops! ■

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BY MELANIE LUKAS, ANNE-KRISTIN LØES,
BENJAMIN NÖLTING AND CAROLA STRASSNER

How to increase organic food consumption in schools



School meals

Eating habits are established at an early stage of life. So, children and youth should be a special target group for promoting sustainable consumption and healthy nutrition. One example is school meal systems which can be utilized to promote better eating habits for a lifetime.

Table 1:

Variations in key criteria between countries



	ITALY	FINLAND	GERMANY	NORWAY	DENMARK
Inhabitants (2010, Eurostat), millions	60.3	5.4	81.8	4.9	5.5
GDP per capita in € (2007, Eurostat) and relative GDP, Italy = 100	25 900 100	34 000 131	29 500 114	60 400 233	41 700 161
Organically managed agricultural land, share of total, % (2009)	8.7	7.3	5.6	5.5	5.9
Number of organic producers (2009)	43 029	4 087	21 047	2 851	2 694
Share of organic products in the food market, % (2009)	3.0	1.0	3.4	1.3	7.2
Average user price for a complete school meal, in €	3.86	0	2.43	4.39	2.93
Willingness to pay for a complete school meal = Average user price in € cent * 100/ GDP per capita	1.49	0	0.82	0.73	0.70

The iPOPY “innovative Public Organic food Procurement for Youth” study (2007-2010) was a research project conducted in Italy, Denmark, Finland, Norway and Germany.

Highly different school meal systems

The project discovered that the arrangements for providing school meals vary considerably between countries, as do user payments. These differences are partly explained by history, social policy traditions, national food culture and habits and the existing infrastructure. These factors in turn affect the use of organic food in school meals. We found a weak link between the proportion of organic farmland in a country and organic consumption (Table 1). Norway, Denmark and Finland have about the same proportion of converted farmland, but Denmark has a far higher per capita level of consumption of organic food (the highest in Europe). While wealthy countries Finland and Norway have a far lower organic market share. The willingness to pay for school meals and quality food also varies substantially and is much higher in Italy, and somewhat higher in Germany, than in the Nordic countries.

Five main scales of variation

We identified five important categories to compare the use of organic ingredients in school meals, that we considered to be the most relevant for characterizing school food systems and the potential for increasing their usage of organic food:

- Type of school food service
- Level of public financing
- Political involvement in school food in general
- Level of specific support for using organic ingredients
- The existence of an organic food supply that is adapted to school food service

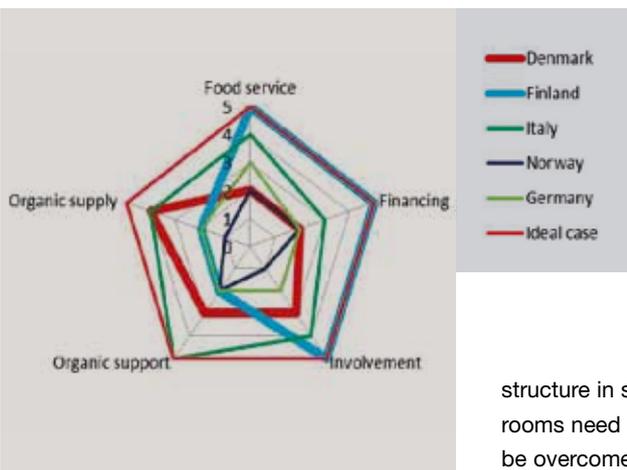
Each of these categories can be scaled from very low or unfavourable conditions for increasing the use of organic ingredients in school meals, to very high or favourable conditions. The most favourable conditions would be when complete meals are served daily, with no user payment, a high degree of public involvement in the school meals system, a high level of public commitment to the use of organic ingredients and a well developed organic market with supply chains specifically adapted to the need of school kitchens.

Of the countries studied, Italy has the highest consumption of organic food in school meals. This country has a highly developed school meal service, with a warm lunch served daily to all pupils up to 13 years who are in school for a full day. There is a significant user payment, but also significant public financial support for infrastructure and staff. On the other hand, there are hardly any national guidelines for school food. This has led some Italian regions to set out guidelines supporting the use of certified food products. Organic produce is the main category of certified products prioritized for school meals, but local specialties and integrated food production are also included. Hence, the proportion of organic food used in Italian school meals has reached a very high level - of up to 40% organic food.

Finland has an excellent school meal system, with complete meals served daily to all pupils up to 18 years and no user payment. The system is supported by strong public bodies and is highly professional, with menus being nutritionally calculated. There is a high level of trust in regional (Finnish) and conventional food, and the proportion of organic produce

Figure 1:

Opportunities and constraints for increasing organic consumption in schools



structure in schools' kitchens and dining rooms need highly coordinated efforts to be overcome. School food systems are complex and involve many actors and stakeholders. Communication, cooperation and professionalism are important elements in creating change. People's values and attitudes are a key factor in promoting organic food

Learning about organic, healthy and sustainable nutrition

None of the school curricula in the iPOPY countries cover organic food or production methods, although all the countries emphasise that it is important to include sustainability and sustainable development in the school curricula. Organic food could be a valuable topic in teaching about sustainability. Food production and consumption could be described, discussed and experienced, in school gardens, farm visits, home economics (cooking) and school meals. Our research showed that pupils were interested and most positive towards organic food when this topic was integrated within several parts of the school's activities. Other studies have shown that schools with a dedicated food and nutrition policy that aim to serve healthy food and establish healthy habits (e.g. encouraging physical activities), were also more positive in their attitude towards the inclusion of organic food in their meals. This suggests that healthy, sustainable and organic food all pull in the same direction and are mutually complementary. ■

used is low. However, there is an ambitious national sustainability plan that includes the goal of serving sustainable food at least twice per week by 2015. Sustainable food is understood in this context as being organic, vegetarian or seasonal. This public goal might prove to be an efficient tool to increase the currently low share of organic produce in school meals. In Norway and Denmark, the normal school meal is a lunch box supplemented by subscription schemes for drinks (milk, fruit juice) and fruits. In Denmark there is significant interest in developing food serving systems, for instance in Copenhagen where the "EAT school food project" serves a high share of organic food. Many Danish municipalities are working hard to ensure a high share of organic food in public procurement, including school canteens. However, the food serving systems are usually based on user payment, and it is a big challenge to change the eating traditions in schools. The lunch break is usually short, there may be no facilities for eating and a warm meal is not (yet) a part of the school culture.

We assigned rankings (1-5) to the five relevant characteristics influencing organic food consumption in school meals (above). For example, a school food system with "complete meals" gets a

high rank, because these systems provide more food during school hours. The pentagon in figure 1 illustrates the "ideal" situation for increasing organic consumption in school meals. We then overlaid the results for each country against this ideal situation, illustrating the potentials of some countries (e.g. Finland), the achievements of others countries (e.g. Italy) and the challenges facing others (Norway, Denmark, Germany).

Policy, guidelines, traditions and attitudes

Increasing or introducing organic food into school meal systems requires more than simply replacing conventional ingredients with organic ones. Such a move needs to be supported by a clear political will to prioritize organic food, including support for supply chains to adapt to the needs of school catering. Political goals and municipal guidelines that prioritize the public procurement of organic food have proven very useful in increasing the consumption of organic food. Individual schools generally do not have the capacity or knowledge to implement school meal systems without professional guidance. So, political and administrative support at all levels is one of the most important preconditions. Obstacles, such as a lack of funding, personnel resources, appropriate supply chains and the infra-

BY JULIA LERNOUD

Young Organics

Being born in a fanatical organic family gives you a different perception of the world. At the beginning it can be tough but then you start to understand why those crazy parents want to change the world. Once you start to get more involved in the organic movement, you start to see that you are not alone.

More and more young people are getting interested in this lifestyle and philosophy, looking for different ways to build their future. This new generation has started to notice that "business as usual" is not working anymore and that, to be able to live harmoniously with our surroundings, we need to look for other ways of life. For many generations youth has been a key player in starting revolutions, trying to change the world and their place in it. Some of those struggles were successful. Others have provided a starting point for the coming generations. One of these is the organic movement, which has continued growing and progressively strengthened. The world has changed and some new needs have emerged while others have remained. We now have some huge issues on our shoulders, challenges such as climate change, the economic crisis, a future in which there might be 9 billion mouths to feed, decreasing energy sources, etc. And the big question, as society, is how are we going to deal with all of this?

A group of young people from different parts of the world has started an initiative to unite young people who are working, searching, struggling to live in harmony with each life on this planet. This was how Young Organics (www.youngorganics.de.vu) was born.

Under the slogan "connect, inspire, act" young people with same needs and ideas try to learn from each other, exchange their experiences and also get their hands dirty in gardening activities. Young organics is seeking to create a global platform, where everybody who wants to exchange, learn, interact and build, can get together. We know that in this aim we need to learn from those that came before us. That's why a dialogue between generations is crucial - to increase our chances of taking the right steps. After all, those who founded the organic movement were mostly young, when they went "back to the land" to reconnect with nature and explore other ways of producing. And those who remained in the cities started to look for healthy food and lifestyles. Uniting youth movements and individuals, Young Organics tries to promote a diverse and dynamic organic movement and provide opportunities for everyone that wants to be involved.

It is important to remember that the youth of today are tomorrow's decision makers: consumers, producers, traders, and even government officials. With this in mind we can see how important it is to work with them and encourage them to be part of the change. We need to create work opportunities, open doors for them and motivate them to join this movement. There is more and more interest in organic issues among the rising generations. And it is the job of today's decision makers to involve them more. By changing young minds we have the possibility of a better society, a better world, a healthy planet.



Young Organics (YO) has been meeting and interacting with young people from different organizations and groups, such as Fair Trade, Transition Town, Slow Food and a young IAASTD group. People from all over the world have got together on the Facebook page and at various workshops such as the 64th UN DPI/ NGO conference for NGOs in September 2011 in Bonn, Germany. This June YO will send out two young campaigners to organise activities at the Rio +20 conference in Rio de Janeiro. Through this exchange we will try to unite different sectors. This is only the starting point. Many challenges will come and we want and need to grow from them. This organic passion is starting to spread. People are becoming more conscious that they can work and live in ways that contribute to a more sustainable society. Let's work for this and open the doors to the ones who are coming. ■

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The MSc Programme in Organic Agriculture (MOA) started at Wageningen University in 2002. The programme adopts an integrative systems approach towards agriculture, with a focus on sustainable animal and plant production and multiple land use. In the three central core courses and the elective options, the gaps between different scientific disciplines are bridged by multidisciplinary groups of teachers.

Master of organic agriculture

Increased environmental concern and consumer interest has led to an expansion of markets for organic products and, as a result, organic agriculture has emerged globally as a recognizable sector. In order to meet the challenge of producing healthy, socially responsible and ecologically sound food, the MSc programme in organic agriculture explores food production, food consumption and multi-functional land use using multiple disciplines (i.e. plant, animal, social and environmental sciences), multiple perspectives (i.e. sustainability, health and ethics) and different geographical scales (local, regional and global). At Wageningen UR research and education in organic agriculture both adopt a systems approach. The MSc programme in organic agriculture prepares students for a wide range of positions related to multiple land use, organic agriculture and the food production chain.

Philosophy

The curriculum has been carefully designed to provide a balance between fundamental and applied sciences. University groups working in different areas; such as agronomy, ecology, soil sci-

ence, animal sciences, pest and disease management, food technology, sociology, communication science and economics all contribute, making this a well-rounded and holistic programme. Special courses have been created in order to ensure that the whole learning experience consists of more than the sum of the individual contributions of each group or discipline. The programme is designed to blend 'theory-and-practice' and stresses action learning and action research (Figure 1).

Overview of the programme

Figure 2 presents an overview of the programme. The core of the programme consists of 3 compulsory core courses.

- Analysis and Management of Sustainable Organic Production Chains. In this course, the students study production chains from an integrated perspective. The ecological, economical and social sustainability of chains are assessed in relation to alternative ways of management.
- Integrated Natural Resource Management in Organic Agriculture. Here, students examine organic production from different

BY COR LANGEVELD, WALTER ROSSING & ANJA KUIPERS



Figure 1
Action learning and action research: an alternative to 'traditional' education and research

perspectives. Inputs from the agricultural sciences (soil, animal and plant sciences) are integrated with those from the environmental sciences (ecology and rural planning) and rural sociology.

- **Masterclass in Organic Agriculture.** This course is a horizontally-structured course with sessions spread throughout the whole 2 year programme. The student group operates as a community of learners. They are updated on topical research in organic agriculture, present their research proposals and results to each other, give feedback on these, organise discussion evenings and participate in an excursion to BIOFACH.

Students have a choice of specialising in either Agroecology or Consumers and Markets. The first specialisation focuses on the natural scientific aspects of organic agriculture, the second on social scientific aspects.

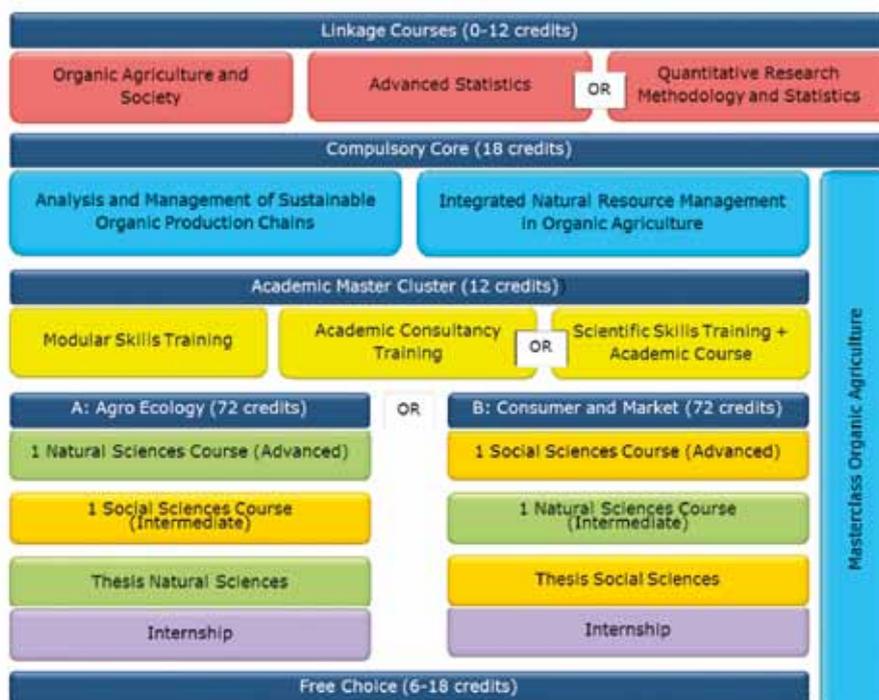
Research areas and thesis opportunities

Students pursuing the MOA have a wide choice of research areas. Several different chair groups (in Organic Farming Systems, Animal Production Systems and Entomology) can supervise theses for the Agroecology specialization. For the Consumers and Markets option the thesis-supervising chair

Figure 2.

Curriculum structure countries

Red: linkage courses (Advanced Statistics is required for specialisation A; Quantitative Research Methodology and Statistics for specialisation B);
 Light blue: compulsory core courses;
 Yellow: courses in the Academic Master Cluster;
 Green: natural sciences elements;
 Orange: social sciences elements;
 Pink: internship.



Examples of thesis research within MOA

Societal and institutional mechanisms driving the development of organic agriculture in Nepal

Citizens and government in Nepal are increasingly interested in organic products and getting away from the problems of pesticide residues on conventional produce. A Nepalese MOA student evaluated the status of organic agriculture in her country from an innovation system perspective. She considered the emerging organic sector as a sociological 'niche' that aims to become part of the dominant 'regime'. Based on workshops, interviews and policy documents she identified the key actors, their interrelations and their impact on strengthening the position of the organic sector. The analysis showed how the sector is currently caught in a vicious cycle where a lack of government goals and of entrepreneurship among farmers and market partners is hindering progress. It also identified that there

groups include Marketing and Consumer Behaviour, Business Economics and Rural Sociology. Examples of thesis research are shown in Box 1.

Organic chairs as a focal point for education and research

Two chairs play a central role in research and education in organic agriculture. The Organic Farming Systems Group (chair: Pablo Tittonell) offers several courses at BSc and MSc level, which also attract students from other programmes at Wageningen and exchange students from other universities. There is also the globally unique 'special chair' for Organic Plant Breeding, attached to the Department of Plant Breeding, currently occupied by Edith Lammerts van Bueren. This offers a dedicated MSc course on Organic Plant Breeding and Seed Production and MOA students can do a master thesis or internship in this field.

The first decade of MOA: students and their subsequent careers
In its ten years of existence, slightly over 200 students have registered for the MOA. The group is diverse, with students from more than 40 countries. Although Dutch students were the largest single group, they only make up 25% of the numbers. Other countries that are well represented include Greece, Ethiopia, Nepal, Spain and China. Graduates have found jobs in various sectors although, unfortunately, there is no available recent overview of the careers of all graduates. A substantial part of graduates (estimated at 20%) found or resumed positions in universities, continuing to do PhD research. Other MOA-graduates have gone onto work for organizations that promote organic agriculture,

are strong and stable actors in the regional agricultural offices and farmers with ambition who are supported by short term NGO projects. This group offers good prospects for growth in the organic sector if supported by appropriate policies.

Explaining yield levels in organic rice production systems

Auroville is a spiritual community in south India where local farmers provide organic food for the thousands of tourists that visit annually. One of the farms was interested in increasing and stabilising rice production as well as assessing the agro-ecological performance of the farm as a whole. Two MOA students, one from India and one from South Africa, visited the farm for three months to study rice production, using on-farm experiments and collecting bookkeeping data for whole farm analysis. Using the data within mathematical models they were able to eliminate various possible causes of low rice yields, and provided insights into the development options at the whole farm level. Their results provided input for further discussions with the farmers on adapting new practices and strategies.



consultancies, educational institutes and public organisations.

With this, a number of graduates decided to work on organic agriculture 'from the grassroots level', either as an advisor as an active farmer. ■

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Walter Rossing - Organic Farming Systems Group, Wageningen University
Anja Kuipers - Educational Institute, Wageningen University

Admission requirements: To be admitted to the MOA, candidates need a relevant BSc degree or equivalent with a minimum Grade Point Average of 70%. Proven proficiency in English, statistics and mathematics is also required.

Further information: www.moa.wur.nl/; MOA.MSc@wur.nl
www.bfs.wur.nl
http://www.plantbreeding.wur.nl/UK/research_chairs.html



BY ULRICH DIERMANN

E-Learning for organic retail

Since October 2010 the Equalita Institute has been running a project entitled "Establishing a European IT-based learning platform for further education in organic food retail". It is established as a "Transfer of Innovation" project under the "Leonardo da Vinci" Programme of the European Union. The aim is to establish a European e-learning platform for professional training and qualification in the organic retail sector.

Organic retail has been, and will continue to be, a dynamic market. However, all its business segments often suffer from a severe lack of qualified personnel, staff and managers. The great need for training could be met by new and innovative methods such as E-Learning. A supply analysis showed that there are no E-Learning opportunities for training qualified organic retailers in Europe, or elsewhere. All the specialists interviewed as part of this survey expressed the need for E-Learning, an innovative and progressive educational tool.

By the end of the project a European E-Learning Platform, offering vocational qualifications in organic retail will be established. The first step was to set up a German language version of the E-Learning platform, with 12 basic modules and the appropriate learning tools and environment. This became the basis for the transfer, adaptation and

translation into the other partner countries and languages.

The functionality of the E-Learning platform has now been tested in the seven partner countries (Austria, France, Germany, Bulgaria, Italy, the Czech Republic and Poland) where it has been shown to be practically applicable.

The result will be a comprehensive IT-based learning platform with 12 basic E-Learning units. They will cover basics such as organic agriculture, processing, and trade structures, together with product knowledge on vegetables, fruits, milk products, cereals and other dried food and retail issues such as organisation, marketing, communication and economics.

The main target groups are the organic retail sector and educational institutions that offer training and qualification for this sector. The platform will be transferred into the practice of the partner countries through a common marketing strategy. Additional value will be generated by certificates, in line with the ECO-QUALIFY Quality Assurance System, which was developed during an earlier project Eco-Qualify II. The project will run until October 2012. The first results were presented at BioFach 2012. ■

More Information: <http://www.equalita.de/web/en/projects/e-learning-for-organic-retail>
Mail: Ulrich-diermann@equalitate.de



An overview of available organic courses

BY PETER BRUL

Study organic agriculture in English, Spanish or Portuguese

Apart from the cases described in this magazine, there are many more courses at different levels in different parts of the world. This article tries to give an overview of what is available – although we don't have a full picture of what is going on worldwide. There are many universities, institutes and consultancies providing study programmes in organic agriculture. We aim to inform you about the possibilities and will try to post more inside information and updates on the website of Ecology & Farming (www.ecologyandfarming.com) in the coming months.

The articles in this issue all concern opportunities in Europe, not only in English, but also German and French. However, there are also MSc, BSc and (postgraduate) short term courses in Portuguese, Spanish and other languages that are available for foreign students. In many cases, organic agriculture may be studied as part of a programme on sustainable agriculture or rural development. Such courses might only provide a rather general introduction on organic agriculture, so you should be clear what level of study and detail you are looking for – especially if you already have some basic knowledge or experience. We are interested in people's experience and opinions about these courses and to hear about those that we have not mentioned in this edition. Please contact the editor (p.brul@ecologyandfarming.com).

Europe

Here is a round up of some other courses not mentioned in this edition. In Germany, the University of Kassel offers MSc programmes in Sustainable International Agriculture (this in conjunction with the Faculty of Agriculture, University of Göttingen). and

International Food Business and Consumer Studies. There are 30 study places in each programme. The Sustainable International Agriculture programme aims to train students to be able to meet global challenges in food supply and the degradation of agro-environments, and focuses on knowledge based options for intensifying production systems while saving and enhancing the productive potential of natural resources. More information (and online application forms) can be found at their web sites www.hs-fulda.de/ifbc or www.agrar-uni-kassel.de/ifbc or by contacting Ute Gilles, at organics@uni-kassel.de

In England, The Royal Agricultural College in Cirencester (<http://rac.ac.uk/>), located between London and Bristol, offers two MSc programmes, with organic agriculture components. Both can be studied full time (over one year) or part time (over two) with the courses starting in October each year. The first course is International Rural Development, which offers a five module core, a range of specialist options and a research project. Students can focus on a range of topics including; climate change, natural resource management, soil management, rural tourism, aquaculture and sustainable and organic agriculture. The other course is in Sustainable Agriculture and Food Security, which focuses more on how sustainable agriculture can improve food supply and quality and allows students to get to grips with organic agriculture, sustainable intensification or small-scale and local food production.

Asia

If you want to study organic agriculture in English, and focus on the tropics, the Singhanian University (situated in the Jhunjhunu

district of Rajasthan, India) offers MA courses in organic agriculture. <http://www.indiaedumart.com/singhanian-university/courses/mba-in-oa.php>.

Another possibility in Asia is the Research Institute of Organic Agriculture (RIOA) of Dankook University in Korea which offers an advanced CEO course in Organic Agriculture in cooperation with ISOFAR. This course is designed to teach farmers, extension workers, inspectors and consultants about organic agriculture. It covers the underlying principles and modern techniques in areas including crop and animal production, food processing, certification, eco-tourism and biogas. Contact: Prof. Dr. Sang Mok for more details.

Mediterranean

For a course with a Mediterranean flavour, one can go to the Mediterranean Agronomic Institute of Bari in Italy (IAMB) which offers an MSc in Mediterranean Organic Agriculture. The application deadline is 31 August and the course lasts 1 year. The MSc programme is open to candidates of any nationality and some scholarships are granted every year; with priority given to applicants from Southern and Eastern Mediterranean, Balkan and Middle East Countries. Candidates should send application forms directly to IAMB. In particular, courses are addressed to managers of national research centres or public administrations in agriculture-related fields, - researchers or assistants from University institutions, officers of agricultural extension service bodies, graduate students not yet involved in production or research activities, professionals and farm managers. The course coordinator is Maurizio Raeli. e-mail: raeli@iamb.it.

Courses in Portuguese are available at the Instituto Politécnico de Coimbra - Escola Superior Agrária de Coimbra in Portugal. Contact Dr Maria Antónia Pereira Conceição, the manager of the Organic Farming course - toinha@esac.pt

Latin America:

In Latin America there are several institutes in different countries that offer courses on organic agriculture in Spanish.

Argentina

■ Tecnicatura en Producción Vegetal Orgánica UNRN/UBA - El Bolsón

<http://www.unrn.edu.ar/sitio/index.php/component/content/article/112-tecnatura-en-produccion-vegetal-organica>

■ Eco Portal (different courses) http://www.ecoport.net/Servicios/cursos_y_posgrados

■ Facultad de Agronomía, Universidad de Buenos Aires - Carrera Técnica de Producción Vegetal Orgánica <http://www.agro.uba.ar/carreras/organica>

Chile

■ IDMA-Centro de Formación Técnica del Medio Ambiente <http://www.idma.cl/carreras-admision-2012/>

<http://www.idma.cl/tecnico-en-agricultura-ecologica/>

■ Huerto Jardín <http://www.huertojardin.cl/cursos.htm>

Colombia

■ SENA - Agricultura Ecológica: Fertilización, suelos y cultivos (Organic Agriculture: fertilization, soil and crops) <http://sis.senavirtual.edu.co/infocurso.php?semid=272&areaid=ALL>

Fertilización Agrícola Ecológica (Fertilization in organic agriculture) <http://sis.senavirtual.edu.co/infocurso.php?semid=273&areaid=ALL>

Agroecología y desarrollo rural (Organic agriculture and rural development) <http://sis.senavirtual.edu.co/infocurso.php?semid=322&areaid=ALL>

<http://sis.senavirtual.edu.co/infocurso.php?semid=322&areaid=ALL>

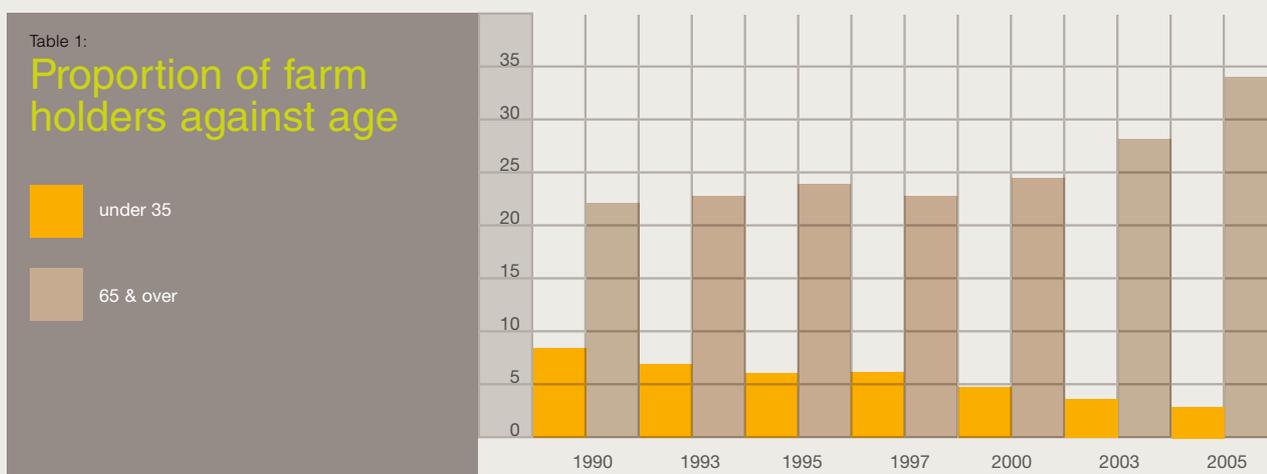
Perú

■ Universidad La Molina Agricultura Orgánica (Organic Agriculture)

http://www.lamolina.edu.pe/agronomia/dhorticultura/html/cursos/a_organica.htm

Distance study

■ Cladead - Agricultura orgánica - estudio a distancia <http://www.cladead.org/> ■





Standards, certification and legislation

Compiled by the Organic Standard

Carlos Escobar recently completed some research on how legislation on organic production and control is implemented in different Latin America countries. His conclusion is that passing a law is not enough.

It is very important to develop an organic agricultural policy that includes not only technical rules, but also educational programmes, financial resources and rural advisory programmes. In addition, it is essential to have or develop the public and private institutional capacity to implement the law. And finally, laws on paper do not provide a comprehensive benefit to organic agriculture, unless they are applied in a standard and rigorous way.

World of organic certification 2012

The ninth edition of The Organic Certification Directory was published in February 2012 by the Organic Standard. The Directory lists all the organic certification bodies in the world and is available for free. The Directory reports that there has been modest growth in the number of certification bodies in most regions of the world since last year (2010) with the number increasing rapidly in some Asian countries, mainly in India. Many of the new certifiers are branch offices of

international certification bodies who have gained approval by the EU or a national government. The global total is now 549, up from 532 in 2010. The majority of certification bodies are located in the EU, Japan, the United States, South Korea, China, Canada, India and Brazil. Eighty-five countries now have a domestic certification body

USA and the EU are now partners

An historical partnership was signed at BioFach Nuremberg 2012 between representatives of the USA government and the EU. The signatories of the letters that formally sealed the partnership were Kathleen Merrigan, US Deputy Secretary of Agriculture; Dacian Cioloş, the European Commissioner for Agriculture and Rural Development; and Isi Siddiqui, the US Trade Representative Chief Agricultural Negotiator.

The agreement, which will come into force on 1 June 2012, will make it possible for organic products certified in the EU or the USA to be sold in the other country/region without any further inspection or certification. The only condition is that the labels of the exported products meet the labelling requirements of the importing country. The trade agreement is currently restricted to products produced or processed within the EU or the USA.

The signatories of the partnership, from left to right: Mr. Cioloş, Ms. Merrigan and Mr. Siddiqui.



Mounting the 'Organic Great Wall'

In an effort to clean up the allegedly fraudulent organic food market in China, authorities have imposed draconian measures, such as the compulsory testing of all crops. The stricter Chinese organic regulation, already very demanding, makes it even more unlikely that products from outside China will be able to pass over the 'Organic Great Wall'. The new version of China's National Organic Product Standard and the Rules on Organic Certification came into effect on 1 March 2012. Organic products sold in China must have the Chinese national organic product logo, a unique number and the name or logo of the certification body. Imported produce must comply with the Chinese national organic standard and rules. However, it is expected that there might be some opportunity for bilateral equivalence negotiations.

EU wine rules published

After a long and cumbersome process the EU has finally taken a decision on standards for organic wine. On 8

March the new rules were published in the EU Official Journal under Commission Implementing Regulation (EU) No 203/2012.

The main issues for discussion have been the permissible sulphur content in organic wine. In the end these levels were set at 100 mg per litre for red wine (150 mg/l for conventional) and 150 mg/l for white/rosé (200 mg/l for conventional), where the residual sugar is lower than 2g/litre.

The new legislation applies to all winemaking taking place after 31 July 2012. Wine produced before that date can be sold with the organic EU-logo if it can be proved that the production process fulfilled the requirements for wine processing under the new legislation. If this cannot be proved, wine produced before 31 July can be sold as 'wine made from organic grapes' until stocks are exhausted, but cannot bear the EU-logo. ■

www.organicstandard.com

As diverse as organic farming itself

BY ROBERT OBRIST

Organic training in Switzerland

Organic farming is a knowledge-intensive system. In recent years the necessary training opportunities have been made available in Switzerland. However, these opportunities could be still better used.





THE TRAINING PROGRAMME FOLLOWS THE PRINCIPLE OF "LEARNING BY DOING"

Seventy percent of young people in Switzerland decide to take a two to four year course to learn a trade when they finish their compulsory education. In agriculture the practical part of the training takes place on working farms and through college courses. These courses mostly cover topics that cannot be so readily learnt on the farm, such as health and safety, installing and maintaining machinery and equipment and hygiene and quality assurance.

The training programme is structured according the principle of "learning by doing", i.e. the focus is on gaining practical skills. The academic teaching takes place in vocational training colleges. The three-year agricultural course comprises 1600 teaching periods, just over half of which provide specialist instruction in crop production, animal husbandry and mechanization. In addition there are optional subjects, general education and sports. Most agricultural apprentices come from farming backgrounds. They can opt to specialize in organic farming,

an option that consists of at least 240 periods.

For a number of years a college in Münsingen, near Bern, has offered courses taught by organic farming experts and catering using food that is guaranteed to be organically grown. Practical tasks are regularly carried out on the neighbouring organic farm. The farm is an interesting place to train, as it has a wide variety of business activities including dairy cattle, pig-rearing, arable and animal feed crops, and direct sales.

At present eleven percent of farms in Switzerland are managed organically and around eight percent of agricultural apprentices specialize in organic farming. For this they complete at least two of the three years of their apprenticeship on a certified organic farm. Fifteen percent of all teaching farms in Switzerland are already managed according to organic standards. Thus it is possible for young people who have grown up on conventional farms to learn the principles of organic farming in the foundation training course.

Advanced vocational training: providing the tools for farm management

These courses have a modular structure with participants receiving further training while in employment. After successful completion of the foundation course they must provide evidence of two years' work experience. Future managers of organic farms can further their education by enrolling in advanced vocational training modules in organic farming. These provide them with additional competencies and entitle them to train apprentices.

Organic farming modules in the advanced vocational training course

- Converting to organic management
- Organic arable farming and animal feed production
- Organic animal feed crops and feed storage
- Organic ruminants
- Organic vegetable growing
- Organic fruit growing

THERE IS ALSO AN EXTENSIVE RANGE OF FIELD VISITS AND COURSES AVAILABLE TO ORGANIC FARMERS, INCLUDING FARMER FIELD SCHOOLS

The opportunity to study biodynamic agriculture has existed for more than 25 years. The practical part of this specialized training takes place on various biodynamic farms. The training is tailored to the individual needs of the participants, which are identified in collaboration with the responsible teaching staff. Technical instruction is provided practically on the farms or in suitable seminar rooms. The technical training requires a high level of motivation and initiative, and is equivalent to adult independent learning.

Degree and Master's courses

A number of technical colleges offer training modules in organic farming. The Environmental Engineering degree course at the ZHAW (Zurich University of Applied Sciences) has an optional unit in Organic Farming and Horticulture. The college runs this unit in close cooperation with the Research Institute of Organic Agriculture (FiBL) and Agroscope, the network of Swiss federal research stations. It offers the most thorough training at this level currently available in Switzerland. Sometimes students' lack of practical knowledge can present a particular challenge. In the ZHAW Life Science Master's degree programme the students can dedicate a half of their course time to specific organic farming topics.

The Swiss Federal Institute of Technology (ETH) Zurich has been offering an option in organic farming for students of agronomy and environmental sciences for more than twenty years. These two



subject areas have now been amalgamated in the Department of Environmental Systems Science. The option consists of two periods a week for one term. The lecturers are experts from FiBL and the Swiss Agroscope Reckenholz-Tänikon Research Station. The course covers all relevant organic farming topics and has an emphasis on showing how organic farming performs in different areas. Comparison is also made with integrated production systems. In an extension course on organic farming systems students carry out a comprehensive sustainability evaluation of selected organic farms. The main aim of this course is for students to gain an understanding of the potential for the further development of organic farming and the methods necessary for this. In addition the ETH offers lectures on the development of the organic market as part of its Master's degree in Agri-food Marketing.

Ongoing training for practitioners

There is an extensive range of field visits and courses available to organic farmers.

Farmer field schools, run by cantonal advisory services, are enjoying increasing popularity. At the moment the focus of these is on animal health. This is closely linked to efforts to reduce the use of antibiotics in organic dairy farming. Topics relating to production technology are very popular, while there is less demand for training in developing and reorienting farms.

Outlook

Successful organic farming involves improving soil fertility, developing plant and animal-friendly systems and successfully marketing the produce. That is quite a challenge. It involves questioning many of the techniques, theories and dependencies of modern-day agriculture. The continuing development of organic farming requires well-educated and responsible people. There is already a lot of knowledge out there: let's make use of it! ■

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ENOAS

BY ANDRZEJ SZEREMETA

Network of Organic Agriculture Students

ENOAS stands for the European Network of Organic Agriculture Students, a network created by students for students. Its aim is twofold. First, it aims to enable students from different European countries studying organic agriculture or having an interest in it, to get in contact with each other. Secondly, it aims to promote organic agriculture. These two aims can be should reinforce each other as at least some ENOAS should go on to work in the organic movement after their studies. A good understanding of the agricultural situation in other European countries and the contacts established will help the organic sector to grow.

ENOAS is the successor of the earlier Nordic Student meetings. The first meeting of ENOAS took place in Finland in summer 2002. Since then, an ENOAS meeting has taken place in a dif-

ferent country each summer. Usually, the ENOAS meetings take about a week and are organized by students in the hosting country, sometimes in cooperation with their universities. The participants travel together to visit organic farmers, wholesalers, certifiers or other interesting stakeholders.

In each of the meetings there are about 20 participants, and over the years about 150 young people have attended the meetings, some coming to several. Throughout the year, students and 'ENOAS-veterans' stay connected via the website (www.enoas.org) or the Facebook group. And of course, many friendships have developed over the years, so personal visits are a common thing.■

We are still looking for volunteers to organize a meeting for 2012. Would you be interested? Then contact us by email: e@enoas.org





How to train the trainers and teachers?

BY PATRICK SIVARDIÈRE

THE FRENCH TRAINING NETWORK FOR ORGANIC FARMING

During the 1980s a few teachers in agriculture schools and colleges were involved in the organic movement and tried to influence their institutions, or at least to inform their students, that another kind of agriculture was possible. Out of this grew Formabio, an informal network that began to develop the first courses in organic agriculture and enable teachers to exchange information and ideas.

Today, Formabio is the official network for organic agriculture within educational and vocational schools and public and private institutes. It has two staff, paid by the General Direction of Education and Research (DGER) of the French Ministry of Agriculture. Its aim is to develop and coordinate the activities of trainers and teachers involved in organic agriculture, at every level of agriculture education. Today, the network covers around 60 schools and institutes, covering all of France and all levels. The network has a meeting once a year to assess the past year's activities and set the programme for the coming year. Course content is discussed and there are exchanges and presentations about new teaching aids.

An official memorandum dated September 6th 2011, requires every kind of agriculture course to take organic agriculture into account. This memorandum also sets out the

minimum requirements for an official qualification to be described as having an “organic orientation”. Furthermore, there are currently four qualifications specifically about organic agriculture: one for incoming farmers, one for technicians and two bachelor's degrees.

In France, there are about 200 public vocational training schools with an attached productive farm where students learn agricultural practices: 50% of them are partly converted to organic farming and 10% are completely converted. These training farms, with their organic crops and livestock, play a key role in teaching students (and also teachers) about the possibilities of organic farming and will hopefully encourage them to visit other organic farms.

In 2007, France set an objective of having 6% of its land converted to organic agriculture in 2012 and 20% by 2020. But today, organic agriculture covers less than 4% of the agricultural area. More effort needs to be made, not just in including organic agriculture in the curriculum but to really establish an agro-ecological approach to farming. If we really want to attain this objective we need to train the coming generation of farmers. One of the difficult questions is training the trainers and teachers. There are only a few training sessions on organic farming for them at the national

or regional level and providing more and motivating them to attend are important next steps.

While it is too early to hope for a general adoption of the agroecological approach, each year sees a growth in organic farming courses and sessions and of e-learning resources - for students, farmers and technicians. Another important gap has been identified: food vendors need to become more knowledgeable, so they can explain to consumers the differences between organic and conventional food. This is particularly important in specialized shops where people appreciate being able to receive advice. But far more efforts

are required, at every link in the chain, including the authorities, if France really wants to reach the 20% target by 2020 and this should start with an increase in education and training on organic food and farming. ■

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More information in French :
<http://www.chlorofil.fr/ressources-et-pratiques-educatives/thematiques/reseau-formabio.html>
<http://annoncesbio.blogspot.com>
Contact Formabio : jean-marie.morin@educagri.fr



French students from the organic bachelor's degree at Biofach 2012



organic orientation

There are 37 agricultural institutes in France with an organic orientation, where you can learn to become a farmer by studying for one year (1200 hours) and passing an official examination (BPREA). They are recognized as having an “organic orientation” with a specific organic course, visits to organic farmers, and sometimes an organic lunch!

Portrait of an organic trade company

BY PETER BRUL

DO-IT



In international trade and domestic markets, trade companies are often the directors of the chain. Together with their partners, the farmers, wholesalers and retailers, they decide what to produce, the quality and price levels and the kind of certification needed. One of the most active players in the organic industry is Do-It, Dutch Organic International Trade, founded in 1991 by Poppe Braam, who is still the CEO. Nowadays it has 38 employees, ten agents in exporting countries and a 40 million Euro annual turnover. The shares of the company are held by the management, suppliers, clients and workers.

Poppe Braam, a farmer's son who studied sociology, was quickly drawn to organic farming. After being an organic poultry farmer he went into business and started his own company. Now as CEO, he is still responsible for the purchases and contacts with the farmers. His sociological studies still inform his work with the farmers who supply Do-It through the 'EcoSocial programme' of IBD (a Brazilian certifier). The mixture of sociology and farming are bearing fruit. Poppe: "Do-It looks for long term partners who want a door to the market and a solid partner, whom they can trust and with whom they can build their future". Do-It has a network of suppliers, who produce a wide range of organic products, either through joint ventures or long term contracts. These partners are in 15 countries, including Brazil, China, Italy

and Thailand and produce an extensive range of grains, pulses, seeds, oils and other products.

Poppe: "In China we work in regions where they have been intensively farming the same crops on the same lands for 6000 years. Traditional, ecologically sound agriculture has real roots here. You don't have to teach people about the principles of organic farming, of the value of soil, recycling, composting, etc. That is so deep in their culture. In such 'projects' there are in general no problems with use of pesticides. When things go wrong in China, it is normally because of fraud in the trade channel. In what you could call 'pioneer societies' like Brazil and Argentina, the cultural background and the vision of farming is totally different. Soil is seen as a production tool, to be used to get good and profitable yields. Organic farming in these settings can be rich in biodiversity, but the approach to the programme is different and you have to work more on awareness to maintain an ecological production style.

Do-It does not treat 'sustainability' as a window dressing, or a wave to surf on, but as the basis and heart of the company. That sounds idealistic, but is combined with a professional focus on the job at hand and on earning money. The philosophy is to contribute towards a sustainable world through organic farming

and trading in organic commodities and consumer brands. This involves having quality certified organic products, respecting the quality of the farmer's life and preserving the earth for future generations. In addition to trade in certified organic products, Do-It also works with the 'EcoSocial seal', which is an adapted programme for social, environmental and fair trade certification. Do-It Works with EcoSocial on organic projects in Brazil, China, India and Thailand. Promotion of better education in rural communities is one of the focus points. One of the weak aspects or a missing link in the projects and in the EcoSocial programme is

that there is no education and training programme on (organic) agricultural skills, although the communities are rural and the income basis (and their future?) is in organic farming. That is one of the challenges for the future. In all the countries where Do-It works, the number of farmers is in decline, often quite rapidly. The company's partners face a better future than most other farmers, due to a good link to the market and the sustainable production methods. The inclusion of training and education in organic farming should be the next step to strengthen the sustainability of the programme. ■



**DO-IT DOES
NOT TREAT
'SUSTAINABILITY'
AS A WINDOW
DRESSING,
IT IS THE HEART
OF THE COMPANY.**

“The divide between the rich and the poor, the privileged and the deprived, the powerful and the marginalised has become marked primarily by a differentiation in access to knowledge and information. Those who have access to cutting-edge knowledge hold the advantage in all arenas of social, political and economic life today.” - *Nelson Rolihlahla Mandela, 2001.*

IFOAM Academy

BY KONRAD HAUPTFLEISCH

Education, information and leadership. These are three legs to a table of growth and sustainability that are not limited to any single human enterprise, but are fundamental to the success of any society or organisation.

The organic agriculture sector has always been one where new ideas meet old ones, where cutting-edge thinking informs traditional values and where something as fundamental as the right to food meets ideals such as sustaining life on our beautiful blue planet. While these ideals seem logical, self-explanatory and self-evident, it is not easy to achieve them. In order for the organic sector to fulfil its role in achieving sustainable growth, it needs to apply itself across the board, by ensuring access to good land, populated by farmers who know how to farm, want to farm and have the skills and knowledge to move those products along a supply chain that can feed the world.



Many organisations apply themselves to one or more of these goals and objectives, and many initiatives have come (and gone) that give impetus to these ideas and ideals.

The IFOAM Academy is a new initiative designed to make the ideals of developing a well-informed, well-resourced and competent sector a reality. The IFOAM Academy, the product of several years work

in research, consultation and planning, is embarking on its first year of training leaders for the global organic sector. As its promotional material states, the Academy aims to cultivate organic leadership. This statement can be interpreted in two different ways: cultivating leaders in organic agriculture, or cultivating an organic style of leadership. This ambiguity is deliberate: the Academy aims to do both.

The organic pioneers in the early 20th century were truly impressive personalities. Through their sheer force of will and commitment, they created an entirely new agenda. They had few role models, little access to documented information, and few resources at their disposal. Much of what they achieved was based on their dreams and their vision. This is exactly what leaders are able to do: turn a dream into a vision, communicate it with others who share that vision, and together manifest a new reality.

Today's organic sector is built on some fairly solid foundations, thanks to the vision of those leaders. In order to further develop the organic sector, a new generation of leaders needs to be developed. This new breed of leaders might well be quite different from those who came before: they will have access to information, have adequate resources for their work, and also be well-versed in tradition, innovation, science and communication. They need to share the dreams and visions of their predecessors, but they also must have the capacity to develop their own visions; that can take organic agriculture through the 21st century and beyond. IFOAM is well-positioned to support and develop such leadership excellence. Its roots are firmly entrenched in the achievements of the past, but it also has access to the latest thinking in research, development, training and economics. As such, it is well positioned to be the global champion of leadership training for the sector.

The Organic Leadership Course (OLC) will be the first of the Academy's initiatives. April 2012 sees the first group of participants from South Asia meeting in India to co-create the first well-skilled global leadership corps for organic agriculture. Preparations for the OLC Course already commenced in March, through web-interface seminars, where the participants have met, worked, debated and shared their thoughts on some of the fundamental issues facing organic leaders today. The course will involve nearly a year of different activities, with two residential face-to-face sessions: one at the beginning and one at the end of the course. The remainder of the year will be a combination of "webinar" sessions and individual work on their own plans to develop themselves and in turn the organic sector; central components of the output of the course. The OLC course is partly based on the very successful and influential Organic Agriculture Development course that was run by Grolink (with support from SIDA) for many



years. One only has to look at the current leaders in global organic agriculture to see the large and lasting impact that OAD has had. The IFAOM Academy aims to continue developing leaders for the sector in a similar way.

While much of the focus of the course will be on the principles of management, communication and leadership, the course also aims to deepen participants' understanding of organic fundamentals. The principles of organic agriculture, processing, trade and marketing and organic guarantee systems will all be covered in the curriculum, alongside those that apply to sectoral development and support systems.

The first course will have a strong regional orientation but will also focus on global trends and challenges. It is envisaged that similar training cycles will be held in other regions of the world and that these courses will follow the same pattern, ensuring that regional needs and aspirations are met by the Academy. In this way, IFOAM aims to improve the support that it offers to the sector globally.

In order to support organic leadership, IFOAM offers this course to people who currently have (or aspire to having) responsibilities in the organic world. The Organic Leadership Course will provide a space for learning and sharing experiences, and for developing innovative strategies and strong networks.

Eligible participants are women and men, committed to the principles of organic agriculture, who wish to achieve personal development and to become leaders within the organic movement. Typical participants may have a background in

farmers' organisations or national organic movements, organic companies, certification bodies, consumers' organisations – in fact, in any organisation or initiative that prioritises the principles and aims of organic agriculture.



The training will broaden participants' knowledge and develop their skills. After the course, participants will be able to analyse situations holistically and draw conclusions in line with the principles of organic agriculture, design strategies and lead and develop people and organisations in an effective and ethical way and manage projects: – in short, act as leaders – turning visions into manifest reality. Nelson Mandela not only understood the nature of social divides, but also the importance of leadership as shown from this quote from a book of his quotations Nelson Mandela-By Himself:

"The leader's first task is to create a vision. His second is to create a following to help him implement the vision and to manage the process through effective teams. The people being led know where they are going because the leader has communicated the vision and his followers have bought into the goal he has set, as well as the process of getting there.

If the IFOAM Academy's leadership course can help to develop leaders even half as good as this, then it is an initiative worthy of support by the whole organic world. ■

Konrad Hauptfleisch is IFOAM's Academy Manager

BY SABINE ZIKELI

Studying organic agriculture and food systems at the University of Hohenheim, Germany

Organic agriculture and organic food systems include much more than only farming without pesticides and synthetic fertilizers or food processing without certain additives – organic agriculture is a holistic approach to farming, food processing and trade including all parts of the system from farm soil and plants to humans, the environment and ethical aspects of the interaction between them.



The organic sector worldwide needs specialists who have this comprehensive know-how on organic food systems. As organic food chains become more and more complex and link actors in different countries, intercultural experiences gain importance. Moreover, as organic farming has left the niche in many countries, organic research becomes more relevant as well and young researchers with broad knowledge on organic systems are needed.

If you are interested to study in an international programme on organic agriculture, enrolling in the M.Sc. Programme “Organic Agriculture and Food Systems” (EUR-Organic) at the University of Hohenheim, Stuttgart, Germany, is a good option. The complete study programme is taught in English and lasts four semesters. Eight compulsory modules covering the whole organic food chain from field to fork are the core of the programme. Active student invol-

vement plays a major role in teaching – participation in excursions, seminars, project work alone or in intercultural teams in cooperation with research institutions or companies as well as e-learning, field work and lab work is part of the studies. For the seven elective modules students have the choice between more than fifty different modules from other M.Sc. programmes on all topics related to agriculture and the environment. By selecting the elective modules each student can design a study profile according to his or her personal interests.

For their M.Sc. thesis students have the possibility to work abroad either in their home countries or within one of the many international research projects of the University of Hohenheim. As the University is strongly engaged in sustainability research with many partner universities and research institutions in Southern countries like Thailand, Vietnam, Benin,

Kenya, Costa Rica and many others, students have many opportunities to participate in projects according to their different research interests. For those students who are more interested in organic agriculture and food chains of temperate regions, the University of Hohenheim offers a large set of research options either in the labs or on its own organic research station. Students can also focus on socio-economics of organic farming and get involved in farmer surveys, modelling or the development of marketing concepts.

If you want to focus strongly on the organic sector in Europe, the study programme EUR-Organic offers an additional opportunity: students can receive a Double Degree if they spend half of their studies at one of the European partner universities of the University of Hohenheim. At the moment, the following universities participate in the Double Degree track of EUR-Organic: Aarhus University,



Hohenheim

University

THE ORGANIC SECTOR WORLDWIDE NEEDS SPECIALISTS WHO HAVE KNOWLEDGE ABOUT ORGANIC FOOD SYSTEMS

Denmark (AU-SciTech), Warsaw University of Life Sciences (WULS), Poland and the University of Natural Resources and Life Science (BOKU), Vienna, Austria. Main topics are the social and economic aspects of organic agriculture in different European countries, markets and marketing, animal husbandry and crop production, organic food processing and organic agriculture in the tropics and subtropics. Within these topics the holistic approach of organic farming is particularly stressed, especially at BOKU, where a system approach is of crucial importance. Depending on the different foci in teaching and research of the partner universities, the students can choose the respective study profiles related to the topics above. In practice, the Double Degree study programme is organized as follows: The student starts with the studies at the University of Hohenheim or at Aarhus University, the so-called "home university". After the second semester the student leaves for the so-called host

university and continues his or her studies there including the Master thesis. Upon graduation, students are awarded a Double Degree diploma. The careers of the graduates of the M.Sc. Programme "EUR-Organic" are diverse: Some are working in certification bodies, in Fair Trade NGOs or organic farmers' associations, while others are employed by organic food traders or in processing companies. Graduates also are employed in international institutions like the Food and Agriculture Organization of the United Nations or work as consultants on national or international level.

Besides, several of the students decided for an academic career and are pursuing a Ph.D. in Germany or other countries.

Currently students of 18 different nations including China, Cameroon, India, Indonesia, Germany, the US, Russia, Sweden, Turkey and Nigeria are studying in this two years' Master programme, either in the Single Degree or Double Degree track. For admission in the programme, you have to fulfil the following conditions: a B.Sc. degree in Agriculture, Economics, Nutrition Sciences, Food Technology or related subjects.

In addition, you have to be fluent in English – if you are not a native speaker you have to submit a TOEFL/IELTS test or similar certificate. Application deadline for students is the 15th of March for non-EU citizens and 1st of June for EU citizens. ■

More information: www.Eur-Organic.eu or <https://agrar.uni-hohenheim.de/eur-organic?&MP=82717-80408>



BY FLORENTINE MEINSHAUSEN

Online Training for Organic Inspectors and Consultants

E-Train



Organic inspectors and consultants need an excellent knowledge of organic standards and how organic operations function. At present, the EU and other national organic regulations do not have specific requirements for training inspectors, who are trained by their respective control bodies.

This means that each control body has to develop its own specific training materials and procedures, which is very time consuming, especially for smaller control bodies. The CERTCOST Report on the Potential of Alternative Certification Systems (Moschitz, 2011), highlighted the benefits of improved training for inspectors and the staff of competent authorities, and the potential of e-learning in this respect.

IMO's E-Train online training platform

The Institute for Marketecology (IMO) was one of the first international agencies for inspection, certification and quality assurance of eco-friendly products, and is one of the most renowned. It has a very long history of training organic inspection and certification staff worldwide. As the process of training staff in more than 40 countries around the world is very challenging, IMO started to develop 'E-Train', an online training platform for inspectors, in partnership with Inextenso, an experienced online training platform provider. Since 2010 new organic farm inspectors have been trained through this platform and a complete set of training courses is now available to train new inspectors of organic farms, processing units or producer groups. E-train is also being used to provide update training for all IMO's staff worldwide in specific topics, such as changes in international certification standards or selected critical control issues, etc.

The advantages of online training

The advantages of online training of organic inspectors are very convincing. Inspectors anywhere in the world can follow the online trainings from their home or wherever they work, and follow the training at their own pace. Jenny Zywiets, one of the

IMO E-tutors, explains that she sets her trainees clear milestones and deadlines and provides close online tutoring. In this way she can ensure continuous progress and gains a good understanding of the achievements of each trainee. Yet the training is not all virtual. There are also training inspections and the first inspections are accompanied by senior colleagues. These aspects complement the process of qualifying as an inspector. With this combination of standard online training curriculum and accompanied audits, IMO is fully confident that all its inspectors worldwide receive in-depth training in organic standards and effective inspection procedures and are made familiar with all key quality management documents, such as inspection forms, policies and standard procedures.

Online training is cost-effective, convenient and flexible. It saves on the costs of coordinating and organising training workshops and trainees can continue their daily duties and integrate the training into their everyday work at convenient times. E-Train is designed to be used world-wide, by staff with different quality internet connections. It contains a mix of presentations, background reading materials and many practical exercises and can be used for both online training and blended learning, where some parts of the course are completed online by trainees and others take place in a workshop with discussions, exercises and case studies.

E-Train online training courses

From 2012 onwards, IMO is offering this, now well tested, online training to inspectors of other control bodies, consultants and other experts (e.g. internal auditors) wishing to understand organic certification requirements and procedures in depth.



Training courses

- Organic Farm Inspection Training (initial training; 4 days)
- Organic Processing and Trade Inspection Training (initial training; 2.5 days)
- US National Organic Program (NOP) Inspector Training (add-on training; 1.25 days)
- Organic Smallholder Group Certification Training (initial training, 2.5 days)
- Organic Wild Collection Inspection Training (add-on training for organic inspectors 2 days)

An online tutor is at hand to answer trainees' questions and provide feedback to the completed exercises. At the end of the course, trainees take an exam and receive an IMO training certificate.

For organic control bodies who wish to develop their own online training courses, IMO can also offer use of the platform and adapt the generic training courses to the control body's specific procedures, interpretations of standards, forms, etc. ■

You can find more information on the courses offered on http://www.imo.ch/imo_services_e/train_en.html or contact e-train@imo.ch for more questions or to book a course.

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CONTACT

Ecology & Farming is a magazine for all elements of the organic movement - from organic farmers' associations to organizations from the organic food industry and Fair Trade; from research institutions to certifiers; from organic consumers to organic advocates. Ecology & Farming provides information on key issues in the organic sector and offers the space for discussions on the topics of the day. The articles published in Ecology & Farming reflect the opinions of their respective authors and should not be interpreted as an official IFOAM position.

IFOAM The International Federation of Organic Agriculture Movements is the umbrella organization for the organic movement. Established in 1972, IFOAM has over 800 affiliates in more than 100 countries and represents the common interests of the organic movement based on the principles of organic agriculture (ecology, health, fairness and care). IFOAM's mission is to lead, assist and unite the organic movement in its full diversity.



Peter Brul has been working in the organic sector as a farmer, researcher and consultant for more than 35 years. He combines the role of Chief-Editor of Ecology & Farming with his own consultancy.

The Van Westering Groep B.V. have been publishing magazines since 1988. VWG also maintains a focus on ecology through Ekoland, the professional magazine for organic farming in the Netherlands and Belgium and Gezond Bouwen & Wonen, a professional magazine about sustainable building and living.

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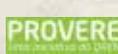
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