AGRICULTURE

Giving Spanish farmers the skills to go organic

Consumer demand for organic products continues to expand on a global scale. Growth across the organic food supply chain requires workers who are well qualified and LIFE is a useful catalyst for these green employment skills.

rganic farming can provide a profitable business model for farmers, both because many consumers are willing to pay higher prices for organic products, and because the organic processes provide lasting protection for the productivity of farmers' land

These facts of farm life are recognised by a Spanish LIFE project that is involved in providing skills to help green agricultural systems in the country. Operational since 2010, the 'Crops for better soil' (LIFE10 ENV/ES/000471) project is bringing together farmers and organic production experts to learn from each other in ways that promote wider adoption of environmentally-sensitive soil management techniques.

"Farmers are losing out because yields are getting lower as soil fertility decreases. So we thought of demonstrating that organic farming can increase and restore soil fertility in ways that can also be economically beneficial and viable," explains project manager Mariano Saz Anchuelo, a director of the beneficiary, Transati, a Spanish logistics company specialising in the supply of organic cereals, seeds and legumes, most of which, prior to the LIFE project, it was required to source from other countries.

"We believe that organic farming is potentially so profitable and, in the long run, the farmers won't need any Common Agricultural Policy (CAP) subsidies. However to achieve this, we have to train [Spanish] farmers to learn about the benefits of using traditional crops and extensive farming techniques," says Mr Saz.

As well as improving the soil quality, he points out that the introduction of traditional crops also will,

The Medusa technology is used for mapping the composition and structure of participating farms' soil and sediment



"Enforce the development of new niches that respond to market demand for organic products." Although the market for organic produce is still in its infancy in Spain, however, the LIFE beneficiary believes that by teaching Spanish farmers the green skills required to produce high-quality products, they will be able to expand the organic sector. "Our overall aim is to offer farmers alternatives to conventional practices by demonstrating the profitability of ecological agriculture in order to help maintain and improve job prospects in rural areas."

Organic skills

Pilot farms have already taken up the challenge of testing organic and sustainable chemical-and-residue-free approaches to growing traditional crops. The farmers receive a mixture of training and mentoring in the application of green skill sets. Early outcomes indicate that LIFE's support is proving to be fruitful in overcoming initial cynicism about organic approaches by demonstrating the tangible difference that organic methods can make to farmland's commercial productivity.

Luis Ballesteros is one of the farmers who has gained from the green skills project and seen the potential that his new knowledge offers. "Before the project we used a lot of chemical products to cultivate crops on our farm. After the LIFE project training, and the continuous help of the project agronomists, I have learnt about crop rotation and I am now not only sowing wheat but also leguminous plants."

He says it was, "Amazing to find out about all of the varieties and the cultivation techniques they need. I was dubious at the start that they would not have big enough yields, but I was proven wrong and I have seen that the wheat quality of the organic plants is much higher when compared against the previous system. They also have a higher economic value on the market."

Mr Ballesteros adds that he is "more and more excited about the future. I want to experiment with other varieties of legumes, oilseeds and cereals and see how and what techniques I need to apply to cultivate them."

Expert help

The value of the work of project agronomists such as Professor Juan Pablo del Monte, Professor of Botany at the Polytechnic University of Madrid (UPM), is also



Jose Milguel Villanueva (left) and Luis Ballesteros examine the quality of their organic crops

appreciated by another of the project's pilot farmers, Jose Miguel Villanueva. "Working in close collaboration with experts such as Juan Pablo is precious and without this first help and scientific guidance we would be at a loss ...We need the continuous practical support of the agronomists to guide us and tell us things like whether we should try to apply a bit more organic fertiliser to our crop or which varieties to try out." He adds that the consultancy role of the agronomists is "essential for the further development of organic farming techniques."

The training provider

Based in Barcelona, Vida Sana is Spain's only association dedicated to promoting organic farming and production along the whole value chain, from farmers to packaged food producers to consumers. As a LIFE project partner it is responsible for all the theoretical training in organic farming skills and certification issues. The first round of training sessions took place in the regions of Guadalajara, Navarra, Zamora and Zaragoza in February 2012, teaching the basic principles of organic farming (things such as crop rotation, weed control and certification).

The second round of training (October 2012) was organised on a national level and led by an expert on weed control from the University of Barcelona (the topic was selected by the farmers). The next course will be on improving soil fertility.

Montse Escutia from Vida Sana says that gathering a group of farmers in one place gives the training a greater value than if it was done on an individual basis: "Putting the farmers together so that not only can they ask the expert questions about techniques (and so acquire more agri know-how), but so that they confront each other about what they are doing and applying, learn from each other and teach one another." She cites this 'cross-learning' as important to fostering the growth of organic farming skills and helping to develop a real "culture of organic" in Spain.

Mr Villanueva also highlights the important role of project partner Vida Sana's training courses (see box), where he learned the theory of organic farming as an initial step prior to practical application.

Mr Villanueva says that he is "still in the learning phase" when it comes to applying the lessons. As well as receiving training in the basics of organic farming and the certification scheme, "We also learnt about soil science, how organic matter is formed and regulated through stable sources of organic fertilisers. We found out about the importance of micro-organisms, worms, fungi and small mammals as they increase the soils' organic matter."

After being initially cautious about the impact of the LIFE project's ongoing green skills support, he has been impressed by the results. "I started out by planting one of the leguminous plant varieties that they had suggested and at the same time I planted a different variety of wheat than the one that I would normally use. We did not use any chemical or organic fertilisers and after only one year the yield and quality was greater."

Cost benefits

Egbert Sonneveld is an agricultural advisor with the project and he is also impressed by how well the farmers have adapted after the initial training. "Before the farmers were buying the most common and cheapest seed on the market, now they are buying different varieties that cost more but produce higher value products when used in organic systems."

He notes, that in addition to the farmers taking part in the project who are following 'certified organic' procedures (90%), the other 10% - conventional farmers - have introduced crop rotation and abandoned the use of chemical fertilisers and pesticides, following the lead of LIFE.

Mr Sonneveld also points out that, "Although [2012] was a very dry year, the organic land actually did better than land farmed using convention-

Seeding the market

The LIFE project has already helped Transati more than double its volume of organic cereals, legumes and oilseeds – from 3 000 to 7 000 tonnes per year. Mr Saz expects that figure to double or triple in the coming years, potentially leading to "four or five" new jobs for people doing the processing, marketing and sales of this rapidly-growing category of agricultural crops.

Luis Ballesteros is using the newly acquired green skills to cultivate traditional leguminous plants



al techniques. I think we are showing that organic approaches can help reduce farmers' reliance on subsidies and in the long run these green skills will also help create more types of green employment in farming."

One way of ensuring that more farmers receive the training needed to develop the organic sector would be through the use of CAP funds. Significant sums are available for such training and farm advisory support from the CAP's European Agricultural Fund for Rural Development, and other sources.

Professor del Monte sees the same potential from broadening the benefits of the green skills programme using mainstream support: "I have seen the enthusiasm in farmers like Luis and Jose Miguel for learning and applying the techniques. They saw the results of the first harvests and they are full of excitement and want to learn more."

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Title: Crops for better soil - Profitable organic farming techniques based on traditional crops: contrasting soil degradation in the Mediterranean

Beneficiary: Transati

Contact: Mariano Saz Anchuelo Email: mariano@transati.com

Website: http://cultivos-tradicionales.com/ Period: 01-0ct-2011 to 14-0ct-2016

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