



What is holding back organic farming in Southern Spain?

NINE BARRIERS AND THE TRANSITION GAP TO SCALING UP ORGANIC AGRICULTURE



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THE PARADOX

A strong organic sector on paper - but a difficult transition in practice

Southern Spain seems, at first sight, an ideal territory for organic agriculture. Its extensive agricultural landscapes, Mediterranean climate, long farming tradition and growing experience with low-input systems provide favourable conditions for the development of organic production. Indeed, Andalusia is Spain's leading region in terms of organic agricultural area: in 2023, it accounted for 48% of the country's total organic farmland, with more than 1.5 million hectares under organic management (MAPA, 2025).

Yet surface statistics tell only part of the story.

Having large areas under organic certification does not necessarily mean that organic farming has become the dominant model, nor that organic products have successfully penetrated local markets. In most farming areas of southern Spain, conventional agriculture remains the reference system, while a significant share of organic production is strongly oriented towards export.

Why is the transition proving difficult?

The answer does not lie in a single technical or economic constraint. Rather, organic agriculture faces a combination of agronomic, commercial, institutional and cultural barriers that interact with each other. Understanding them is essential if organic farming is to move from being an important niche towards becoming a mainstream component of Mediterranean agriculture.

NINE BARRIERS AT A GLANCE LEADING TO A TRANSITION GAP

01 Economic risk

02 Value-chain bottlenecks

03 Weak domestic demand

04 Mediterranean constraints

05 Knowledge gap

06 Administrative burden

07 Communication limits

08 Climate risk

09 Scaling challenge

These barriers operate at two closely connected levels. Some make it harder for individual farmers to convert from conventional to organic farming; others limit the capacity of organic agriculture to consolidate and scale as a production model. Understanding both dimensions – conversion and scaling – is essential to closing the transition gap.

01

The economics of transition: farmers need more than environmental arguments

For farmers, changing production systems is not merely an environmental choice; ultimately, it is also a business decision. Transitioning to organic farming inevitably involves a degree of uncertainty. Farmers may need to modify fertilisation, pest and disease management, weed control and soil management practices while simultaneously meeting certification requirements. During the conversion period, these changes may entail additional costs and risks before farmers can fully benefit from the organic label and any associated market advantages. This creates one of the most persistent barriers to

conversion: the perceived imbalance between risk and reward (Crowder & Reganold, 2015).

The environmental advantages of organic agriculture may be compelling from a societal perspective, but farmers operate within narrow economic margins. A system that provides benefits in terms of biodiversity, soil quality or reduced pesticide use will not be widely adopted unless it also offers an economically credible pathway for the farm.

Organic price premiums can help offset the additional costs and risks of conversion, but they are neither universal nor guaranteed

and may vary considerably across products, markets and years. More importantly, farmers can only benefit from these premiums if their products reach the market as organic. When part of the production ultimately enters conventional supply chains, this added value is lost, reducing the economic incentive for certification.

The critical question for many farmers is therefore remarkably practical:

Will changing the way I farm improve or at least protect the economic viability of my farm?

02

Producing organically is only half of the challenge

The success of organic agriculture depends not only on production but also on what happens after the farm gate. Processing facilities, cooperatives, wholesalers, retailers and logistics systems must be capable of keeping organic products separate, traceable and commercially identifiable. Where these structures are insufficient, organic products may lose part of their added value along the supply chain. This is particularly relevant in agricultural regions

characterised by large volumes of relatively undifferentiated commodities. Olive oil provides a good example. Andalusia is the world's leading olive-growing region and organic olive production has expanded substantially. Nevertheless, converting an olive grove to organic management does not automatically guarantee that the resulting olive oil will reach consumers as a differentiated organic product commanding an adequate price premium.

A similar problem can occur in other Mediterranean crops. Increasing organic production without simultaneously developing processing, distribution and marketing capacity risks creating a bottleneck: organic products are produced, but their organic identity is not fully monetized (European Commission, 2021).

Scaling organic agriculture therefore requires scaling the entire value chain.

03

A market that still looks beyond Spain

One of the paradoxes of Spanish organic agriculture is that Spain is a major producer, while domestic consumption has historically lagged behind that of several northern European countries. This has encouraged a strong export orientation (OECD, 2023).

Exports are clearly an opportunity. Access to consumers willing to pay for organic products has supported the expansion of organic farming in Mediterranean regions. But excessive dependence on external demand also creates

vulnerability. A resilient organic sector cannot rely exclusively on distant markets. Stronger local and national demand can provide additional outlets, shorten supply chains and reinforce the connection between organic production and the territories where it takes place.

Price remains an important obstacle. Many consumers express positive attitudes towards environmentally friendly food but make purchasing decisions in which affordability plays a decisive role. During periods of

inflation or declining purchasing power, the difference between conventional and organic prices becomes particularly important.

The challenge is therefore not simply to persuade consumers that organic food is desirable.

It is to make organic products visible, accessible and economically competitive enough to become part of ordinary purchasing habits.



04

Organic practices need to be adapted to Mediterranean conditions

Organic farming in southern Spain also operates under environmental conditions that differ markedly from those of central and northern Europe. Water scarcity, high temperatures, irregular rainfall, low soil organic matter and erosion are major constraints across Mediterranean agricultural systems. Climate change is intensifying many of them (European Environment Agency, 2024). Organic farming cannot eliminate these limitations.

Replacing synthetic inputs with permitted organic alternatives is not sufficient. Successful organic agriculture requires a more systemic redesign of farm management:

improving soil structure, increasing organic matter, managing vegetation cover, promoting functional biodiversity, optimising nutrient cycles and making more efficient use of scarce water resources. This transition is knowledge-intensive.

In woody-crop systems such as olive groves and vineyards, for example, cover crops can provide major benefits for soil protection, biodiversity and carbon storage. But their management must be adapted to local rainfall and soil conditions to avoid excessive competition for water.

Plant protection creates similar dilemmas. Organic

farmers have fewer authorised products available and therefore depend more heavily on prevention, monitoring, biological control and appropriate management practices.

The question is consequently not whether organic farming “works” under Mediterranean conditions. It can and does. The challenge is ensuring that farmers can adapt organic practices to the specific conditions of their farms. And this brings us to a closely related barrier:

Access to the knowledge and specialised advice needed to do so effectively

05

The knowledge gap

Moving from conventional to organic production involves much more than substituting one fertiliser or pesticide for another. Farmers need to understand increasingly complex interactions between soils, crops, nutrients, pests, beneficial organisms, water and climate.

Generic recommendations are rarely enough. A practice that performs well in an irrigated horticultural crop may be

inappropriate in a rainfed olive grove. Even within the same crop, soil type, slope, rainfall, cultivar and farm structure can substantially alter the outcome.

Research therefore needs to be translated into practical recommendations adapted to real farming conditions. Demonstration farms, field trials, farmer-to-farmer exchanges, advisory services and living-lab approaches can

play an important role here (Padel, 2002). Farmers are understandably reluctant to adopt practices whose performance they have not seen under conditions comparable to their own.

The transition becomes considerably less abstract when farmers can observe the results in a neighbouring vineyard, olive grove or horticultural farm.

06

Administrative complexity can discourage conversion

Organic agriculture is also a regulated production system. Certification is essential: consumers must be able to trust that a product marketed as organic actually complies with established standards. But certification inevitably entails inspections, documentation and administrative procedures.

For large farms or well-organised cooperatives these requirements may be relatively easy to absorb. For small producers, however, the

administrative burden can become disproportionately important (Sacchi et al., 2024). This is particularly problematic when bureaucracy is combined with uncertainty over market premiums.

A farmer who perceives organic farming as involving more paperwork, greater production risk and no guaranteed economic reward has little incentive to convert, regardless of its wider environmental benefits.

Reducing unnecessary administrative friction, improving digital tools and strengthening technical support can therefore be just as relevant to organic expansion as developing new agronomic practices.

Organic farming needs to be not only environmentally sound, but also administratively manageable for farmers.

07

Organic farming also has a communication problem

Consumers today encounter a growing number of environmental claims (Dreist et al., 2026): organic, local, regenerative, sustainable, zero-residue, climate-friendly, carbon-neutral and many others. For specialists, these terms have different and relatively precise meanings. For consumers, however, the differences are often much less clear.

Organic certification has an important advantage: it is based

on a legally defined European framework with specific rules and controls. Yet many consumers are not fully aware of what makes organic production different from other environmental claims.

Communication can also become counterproductive when organic agriculture is presented as a simple confrontation between “good” organic farmers and “bad” conventional farmers. The

reality in the field is far more nuanced.

Effective communication should therefore focus on evidence, practical results and real opportunities for farmers and consumers.

Organic agriculture will gain ground not through labels alone, but by clearly showing what it can deliver and why it matters.



08

Climate change makes the transition more urgent and more difficult

Southern Spain is one of the European regions where agriculture is particularly exposed to climate change. Increasing temperatures, more frequent droughts and greater rainfall variability are already changing the conditions under which farmers operate (European Environment Agency, 2024).

This creates a double challenge for organic agriculture. On the one hand, practices frequently associated with organic and agroecological management (increasing soil organic matter,

reducing erosion, improving soil biological activity and diversifying agroecosystems) can contribute to more resilient farming systems. On the other hand, climate stress can make farmers more reluctant to experiment.

When water availability is uncertain and yields are already threatened by increasingly frequent extreme weather events, changing production systems may be perceived by farmers as an additional risk. This makes it essential for organic transition

strategies to integrate climate adaptation from the outset. Organic agriculture should not be approached simply as a certification scheme, but as part of a broader effort to make Mediterranean farming systems better prepared for a changing climate.

The transition to organic farming must therefore go hand in hand with the transition towards more climate-resilient agriculture.



09

From individual pioneers to viable agroecosystems

Southern Spain already has many of the ingredients required for a much larger organic sector: experienced farmers, research institutions, advisory services, cooperatives, dynamic agri-food companies and extensive agricultural territories suitable for agroecological innovation. What is often missing is stronger integration between these elements.

A farmer cannot transform the food system alone. Neither can a researcher, a cooperative, a retailer or a public administration.

Scaling organic agriculture requires an ecosystem in which technical innovation, farmer knowledge, processing capacity, market development, consumer demand and public policy evolve together (European Commission, 2021).

This is precisely where initiatives such as **SCALE-it** become relevant. Scaling successful organic solutions requires moving beyond isolated experiments and identifying which innovations work, under which conditions, for whom, and what prevents their wider adoption.

Southern Spain offers an excellent laboratory for this challenge. Its olive groves, vineyards and horticultural systems combine enormous productive importance with some of Europe's most pressing environmental constraints.

The challenge is not simply to make organic farming work, but to create the conditions that allow it to work at scale.

The real obstacle may be the transition itself

There is no single barrier preventing organic agriculture from gaining further ground in southern Spain. There is instead a **transition gap** (Läpple & Kelley, 2013).

Farmers need evidence that new practices will work. They need technical support while adopting them. Organic products need supply chains capable of preserving their added value. Consumers need affordable products and clear information. Researchers need to provide solutions that work outside experimental plots. And policies need to reduce,

rather than increase, the uncertainty associated with change.

Organic agriculture will expand not simply because society asks farmers to produce differently, but because farmers, businesses and consumers can see a viable pathway for doing so.

The question for southern Spain is therefore shifting. It is no longer simply "Can we produce organically?" Thousands of farms have already demonstrated that we can. The more important question is:

How do we make organic agriculture sufficiently profitable, reliable, accessible and scalable to move from successful individual experiences to a genuine transformation of the Mediterranean food system?

Finding practical answers to that question will determine how far (and how fast) organic agriculture can advance across southern Spain.

FROM BARRIERS TO ACTION

Turning obstacles into opportunities for scaling organic agriculture

Identifying barriers is only useful if we translate them into **needs for action**. Each obstacle points towards something that farmers, value chains, consumers, researchers and policymakers need in order to make the organic transition easier, safer and more attractive.

Barrier	What is needed
01 Economic risk	Reduce uncertainty and demonstrate viable business models.
02 Value-chain bottlenecks	Build supply chains that preserve and reward organic added value.
03 Weak domestic demand	Make organic products more visible, accessible and competitive.
04 Mediterranean constraints	Adapt solutions to local soils, crops, water availability and climate.
05 Knowledge gap	Turn research and experience into practical, farm-ready knowledge.
06 Administrative burden	Simplify procedures and strengthen support for farmers.
07 Communication limits	Communicate clearly what organic farming delivers and why it matters.
08 Climate risk	Make resilience and climate adaptation integral to the organic transition.
09 Scaling challenge	Connect farmers, researchers, advisors, businesses, markets and policymakers.

This is where SCALE-it comes in

SCALE-it is working to identify solutions that already work, understand the conditions that make them successful, and develop strategies to accelerate their uptake and scaling across Europe.

The goal is not simply to overcome individual barriers. It is to create the technical, economic, market, knowledge and institutional conditions that allow successful organic solutions to move from isolated examples to large-scale impact.

From barriers to needs. From needs to solutions. From solutions to scale.

<https://scale-it-organic.eu>

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**Upscaling efficient alternatives for
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