ETICOF

STEP BY STEP TO ORGANIC

A Farmers' Guide to Conversion

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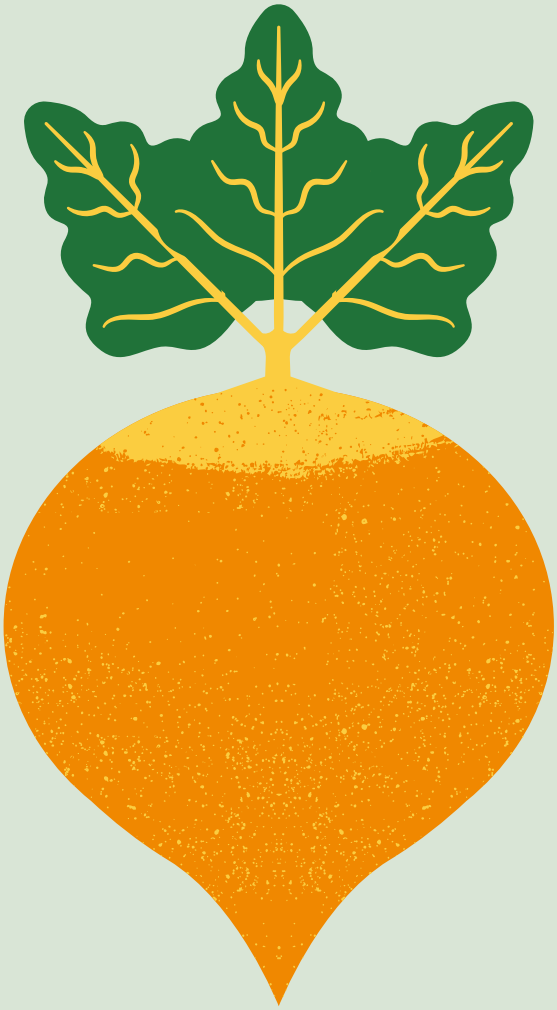
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1. Introduction

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1. Introduction

"Another world is not only possible, she is on her way.
On a quiet day, I can hear her breathing." — Arundhati Roy

The specific objective of this **Farmers' Guide to Conversion** is to deliver practice-oriented material and information to farmers who are interested in conversion to organic farming. It is a guideline for the conversion process and conveys basic and practical knowledge about organic farming and the conversion steps. It includes examples of best practices and innovative approaches from four EU countries (Germany, the Czech Republic, Slovakia and Hungary), which underline the practical character of the material and improve its user-friendliness for farmers.

The guide is the result of the Erasmus+ Project **ETICOF** (Education, training, and innovations in conversion to organic farming, No. 2022-1-SK01-KA220-HED-000086079).

1.1 Motivation for farmers

Farming is more than just a profession – it is a life's work, a responsibility and a daily challenge at the same time. Especially in times of increasing demands from markets, politics and the climate, farmers often have to ask themselves: What is my perspective, and how can I contribute to a sustainable future and a grandchild-friendly agriculture?

Many experiences from the conversion practice show: Converting to organic farming is a real perspective that needs to be carefully considered. This includes the conviction that organic farming contributes to the saving of the planet's natural resources, as well as the economic sense. However, it is important to note that conversion to organic farming is not suitable for all farms or at all times.

Converting your farm to organic farming is not about a radical change, but about a well-planned, gradual conversion – adapted to your farm, your land and your goals. With this guide, we want to give you an orientation, motivation and guidelines to dare to step into organic farming.

1.2 Purpose and target group of a Farmers' Guide to Conversion

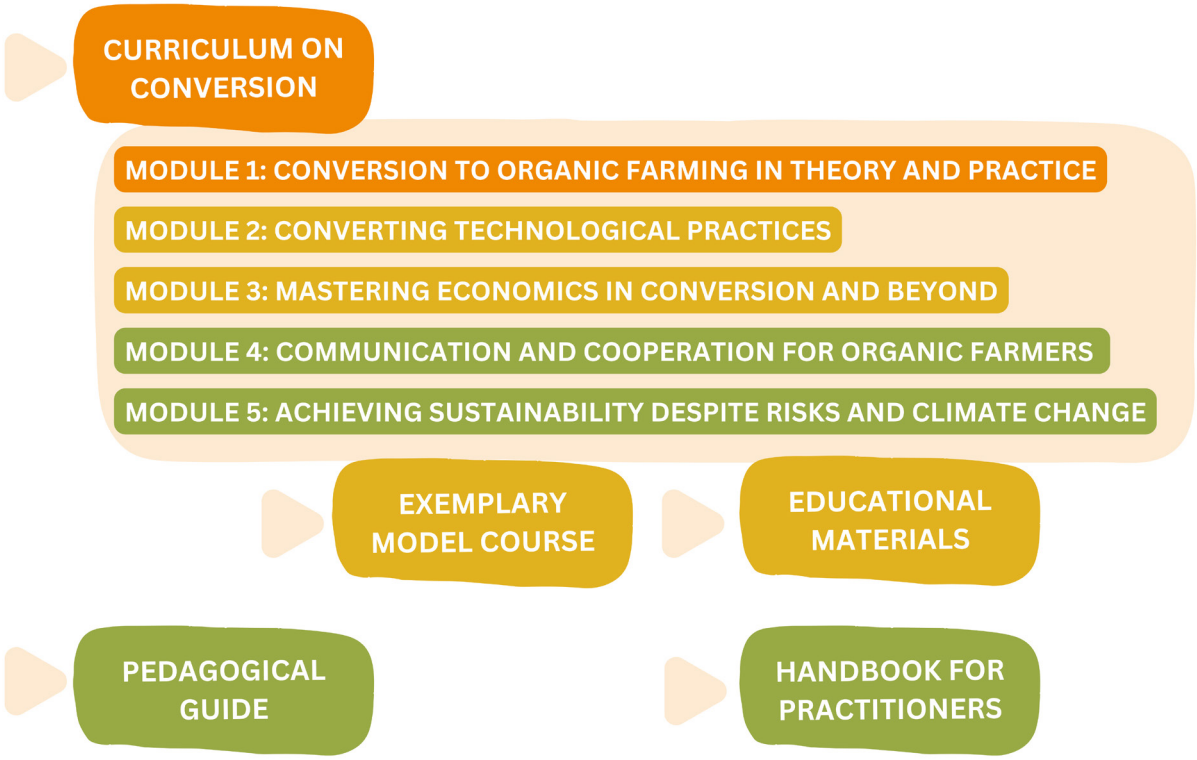


Figure 1.1. *Project results of ETICOF (https://eticof.uniag.sk/)*

The Farmers' Guide to Conversion is based on the educational material, pedagogical guide, and the curriculum of the ETICOF Project by adapting these into practitioner-relevant content. The purpose of the Guidebook is to give an overview and basic knowledge about organic farming and to motivate farmers to convert to organic farming, and to share relevant experience in the conversion process. To make it practice-oriented for farmers, the Guidebook includes best practice examples and innovative approaches of the different countries of the ETICOF Project.

As each farm is unique, the conversion strategy must be tailored to what works best. The best practice examples and innovative approaches serve as inspiration but should not be interpreted as applicable to every farm.

The Farmers' Guide is intended for conventional farmers who are interested in converting to organic farming, as well as for advisors, consultants and trainers who work in this field.

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1.3 What is organic farming?

The roots of organic farming go back as early as 1924 when biodynamic agriculture was founded, which sees the farm as an organism. This was later followed by organic-biological farming (in the 1960s). It views agriculture as an ecological cycle and doesn't use pesticides. Organic farming has grown steadily since its inception. Today it is anchored by law in the EU and has thus become an integral part of agriculture. (Baumbach-Rothbart, 2025)



Figure 1.2. *The EU organic logo*

In September 2005 in Adelaide, Australia, the General Assembly of IFOAM – Organics International passed a motion to establish a succinct Definition of Organic Agriculture.

> *"Organic Agriculture is a production system that sustains the health of soils, ecosystems, and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture combines tradition, innovation, and science to benefit the shared environment and promote fair relationships and good quality of life for all involved." (cit. IFOAM General Assembly 2008)*

Objectives of organic production:

Organic production shall pursue the following general objectives **(Regulation (EU) 2018/848, Chapter II, Article 4)**:

a) contributing to protection of the environment and the climate;

b) maintaining the long-term fertility of soils;

c) contributing to a high level of biodiversity;

d) substantially contributing to a non-toxic environment;

e) contributing to high animal welfare standards and, in particular, to meeting the species-specific behavioural needs of animals;

f) encouraging short distribution channels and local production in the various areas of the Union;

g) encouraging the preservation of rare and native breeds in danger of extinction;

h) contributing to the development of the supply of plant genetic material adapted to the specific needs and objectives of organic agriculture;

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i) contributing to a high level of biodiversity, in particular by using diverse plant genetic material, such as organic heterogeneous material and organic varieties suitable for organic production;

j) fostering the development of organic plant breeding activities in order to contribute to favourable economic perspectives of the organic sector.

Although EU regulation forms the foundation for organic farming, each country adapts and implements it according to local conditions. Additionally, farming associations (e.g. Naturland, Demeter and Bioland in Germany) define stricter rules.

For details, see chapter → *6.5 EU subsidies for organic farming*

1.4 The closed cycle farm approach

A closed cycle is one of the most important elements of organic agriculture. This kind of farm management aims at producing feed and nutrition needed for animal husbandry and plant cultivation at your own farm. Instead of using synthetic fertilizer, in organic farming, plant and animal fertilizers that are part of the circle are used. This also means that the number of animals a farm can keep depends on the size of the farm.

The so-called circular economy aims to ensure that feed and nutrients for animal husbandry and crop production are largely produced on the farm's land and recycled within the farm. This also results in the so-called area-based animal husbandry on organic farms. This means that the number of livestock kept on the farm is always limited by the size of the farmed area. Livestock density must therefore be planned in such a way that 170 kg of nitrogen per hectare of agricultural land per year from livestock manure (EU Organic Regulation) or 112 kg N/ha per year (guidelines of the crop production associations) must not be exceeded. (Baumbach-Rothbart, 2025)

Other important elements of organic agriculture are preventive plant protection and a ban on genetically modified organisms (GMO). This is possible by focusing on healthy soils, a diverse crop rotation, and the right choice of varieties. Simultaneously, organic agriculture is the way to go when it comes to climate change adaptation and mitigation. Many elements of the closed farm cycle are a way to support farmers who struggle with the challenges of climate change. Avoiding mineral fertilizers contributes to climate protection and a higher humus content improves the water retention capacity of the soil and increases soil fertility. In addition, biodiversity is higher on organic farms, which contributes to a more stable ecosystem.

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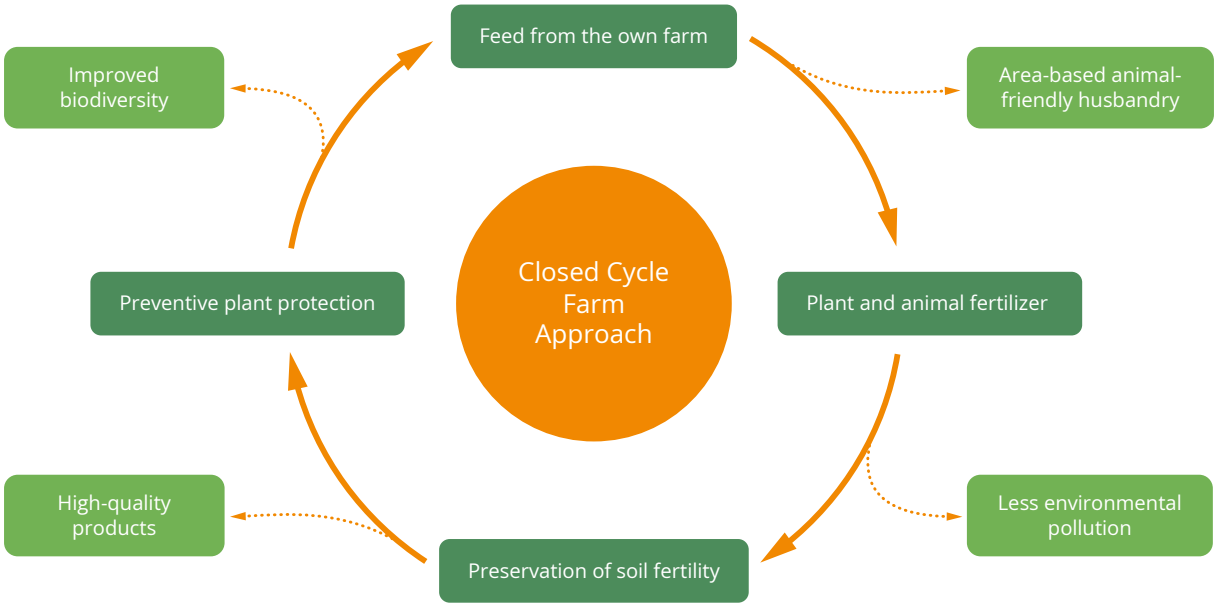


Figure 1.3. *The basic principle of the closed cycle farm approach and its effects*

Further resources

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1 Introduction

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2. Why convert to organic farming?

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2. Why convert to organic farming?

What if the land beneath your feet could share its story?
Would it speak of rich soil and resilient ecosystems,
or would it reveal the struggles of overuse and imbalance?

For many farmers, converting to organic farming starts with a simple question: how to keep the farm productive, profitable, and resilient for the long term. Organic farming puts the focus back on the basics – healthy soils, robust crops, and livestock systems that work with nature rather than against it. By relying on well-designed crop rotations, the use of organic manure, and greater on-farm biodiversity, organic systems can reduce dependence on costly external inputs and help farms cope better with weather extremes and changing climate conditions.

From an economic perspective, organic farming can offer access to premium markets, more stable prices, and subsidies during and after conversion. Demand for organic products continues to grow, and many farmers value the greater independence from external inputs that organic systems provide. However, successful conversion typically involves continuous learning and exchange of experience, as farmers adjust practices and respond to site-specific challenges. Peer-to-peer learning – through farmer associations, advisory services, field days, and study visits – as well as cross-visits to other farms and countries, often organised within EU-funded projects, plays an important role in reducing risks and improving outcomes during conversion. Conversion can also bring benefits for farm image, local communities, and succession planning.

At the same time, organic farming contributes to wider European goals for a more sustainable food system. It aligns with the objectives of the EU Green Deal and the Farm to Fork Strategy by reducing environmental impacts, supporting biodiversity, and strengthening rural areas. For farmers, this alignment can translate into long-term policy support and recognition for farming practices that deliver public goods alongside food production.

2.1 Ecological and environmental advantages

Organic farming systems rely on methods that work with nature instead of depending on many external inputs, using cover crops, compost and other organic materials, rotating different crops, managing weeds with tools or heat, and avoiding synthetic fertilisers, pesticides, and genetically modified organisms (GMOs) which are the key

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environmental and ecological advantages. These practices are intended to support farm productivity while reducing environmental impacts, although outcomes may vary depending on soil type, management intensity, and the stage of conversion to organic farming. In many cases, organic management is associated with higher levels of soil organic matter – the mix of decomposed plant residues, compost, and other natural materials that contribute to improved soil structure, nutrient availability, and water-holding capacity – particularly once organic practices have been established over time. Organic soils often exhibit improved structural stability and increased microbial activity, reflecting higher abundance and diversity of soil microorganisms such as bacteria and fungi involved in organic matter decomposition and nutrient cycling. In temperate regions, long-term organic management can lead to substantially higher soil carbon stocks compared with conventional systems, mainly due to regular organic matter inputs and the limited use of synthetic nitrogen fertilizers; however, such increases are not always observed during the initial years of conversion.

Biodiversity also benefits greatly, as organic farms often host 23–30% more species – including pollinators, beneficial insects, birds, soil fauna, and rich microbial communities. Features like hedgerows, wildflower strips, and mixed crops create habitats that stabilise ecosystems, support pest control, pollination, and nutrient cycling, and reduce reliance on synthetic inputs (Bengtsson et al., 2005).

Organic systems also reduce the need to buy external inputs, with plant protection costs dropping by 75–100% per hectare and fertiliser costs by 45–90% (European Commission, 2023b), and cutting the use of synthetic nitrogen and pesticides lowers the risk of water pollution and chemical run-off. Although yields may be lower, the environmental impacts per hectare – such as nitrogen losses – are consistently lower, leading to cleaner water and healthier ecosystems.

Dimension	Key Advantages	Key Challenges
Environmental & Ecological	Higher soil organic carbon, improved structure, better water retention Enhanced biodiversity (+23–30% species richness), including pollinators, birds, and soil fauna (Bengtsson et al., 2005) Reduced synthetic fertiliser/pesticide use, lowering eutrophication & runoff risk Contribution to EU Green Deal, Farm to Fork, and Biodiversity Strategy targets	Potentially higher greenhouse gas emissions per unit yield (e.g., N_2O) Land requirements may increase to offset the yield gap Some management practices require higher labour and expertise

Table 2.1. *Summary of key environmental and ecological advantages and challenges of converting to organic farming*

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2.2 Economic advantages and challenges

Three connected factors determine the economic viability of converting to organic: the stability of markets that offer organic price premiums, changes in production costs due to lower input use and higher management needs, and policy support through the Common Agricultural Policy (CAP) and related EU programmes. These factors explain the economic advantages shown in the table 2.2., as farmers consider how price premiums, reduced fertiliser and pesticide costs, and CAP agro-environmental and animal-welfare payments influence their profitability, risk, and competitiveness. With EU organic food sales nearly doubling between 2015 and 2020 and organic farmland increasing by 41%, growing demand (European Commission, 2023a) – boosted by the Farm to Fork Strategy – has strengthened premium markets. Lower variable costs arise from using organic amendments, rotations, and biological pest control, and even with lower yields, many organic farms match or exceed the income of conventional farms because 20–40% price premiums and subsidies compensate for smaller harvests and can lead to higher income per labour unit.

However, the economic challenges in the table 2.2. also play a major role. Organic yields typically reach only 80–85% of conventional levels (Riar et al., 2025), depending on crop, soil, and experience, which can require more land and create difficulties in areas where land is scarce. Labour demands are higher for weed control, pest management, and biodiversity measures, raising seasonal costs. The three-year transition period is another significant hurdle: farmers must follow organic standards while yields often dip, but they cannot yet sell at organic prices. Additional barriers include market volatility and uncertain premiums, certification costs, administrative paperwork (especially for small farms), and limited economies of scale in wholesale markets.

Dimension	Key Advantages	Key Challenges
Economic	Growing EU organic market: retail sales doubled (2015–2020)	Yield gap (average 15–20% yield loss l)
	Lower input costs for fertilisers and pesticides (45–90% savings)	Three-year transition period without organic premiums
	Access to CAP agro-environmental and animal welfare payments	Market volatility and fluctuating premiums
	Price premiums (20–40%) and subsidies can offset lower yields	Certification costs and administrative burden
	Potentially higher income per labour unit	Limited economies of scale in wholesale markets

Table 2.2. *Summary of key economic advantages and challenges of converting to organic Farming*

2.3 Health and social benefits

Public and farm health

One major health benefit of organic farming is that it reduces chemical exposure for both consumers and farmworkers. People who eat mostly organic food usually have lower levels of pesticide residues and heavy metals like cadmium in their bodies, and organic crops often contain more antioxidants, which are good for overall health (Barański et al., 2017). Some studies also show links between eating organic food and lower risks of obesity, type 2 diabetes, and certain cancers, although these results are not yet fully proven (Mie et al., 2017). Organic livestock rules in the EU – such as giving animals more space, outdoor access, and limiting antibiotics – also lead to healthier animals and reduce chemical exposure for workers.

Social and community benefits

Organic farming also brings social benefits. Because organic farming needs more skills and knowledge, it creates good-quality rural jobs and helps keep young people involved in farming. By reducing the need to buy chemical inputs, organic farmers are less affected by price changes in global markets. Many organic farms sell directly to customers through farm shops, markets, or Community Supported Agriculture (CSA), which builds trust and allows farmers to keep more of the value of what they produce. Organic farming also fits well with EU policies like the Green Deal and Farm to Fork Strategy, which can help farmers access funding and technical support. However, the system requires more labour and ongoing training, which can be challenging for some farms.

Dimension	Key Advantages	Key Challenges
Health	Reduced consumer exposure to pesticide residues and heavy metals Higher antioxidant (polyphenol) content in crops Observed links to lower risk of obesity, type 2 diabetes, and certain cancers Better animal welfare under EU organic standards Lower occupational pesticide exposure for farm workers	Long-term human health benefits have not yet been conclusively proven Higher risk of certain livestock diseases if standards are not strictly implemented

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Dimension	Key Advantages	Key Challenges
Social & Community	More skilled, knowledge-intensive rural employment Encourages younger generation engagement in farming Strengthens farmer autonomy via reduced dependence on external inputs Build consumer trust through transparency and traceability Strong policy alignment improves access to public support	Higher labour demands may be challenging to meet in regions with workforce shortages Requires ongoing training and advisory support for effective management.

Table 2.3. *Summary of key social and health advantages and challenges of converting to organic farming*

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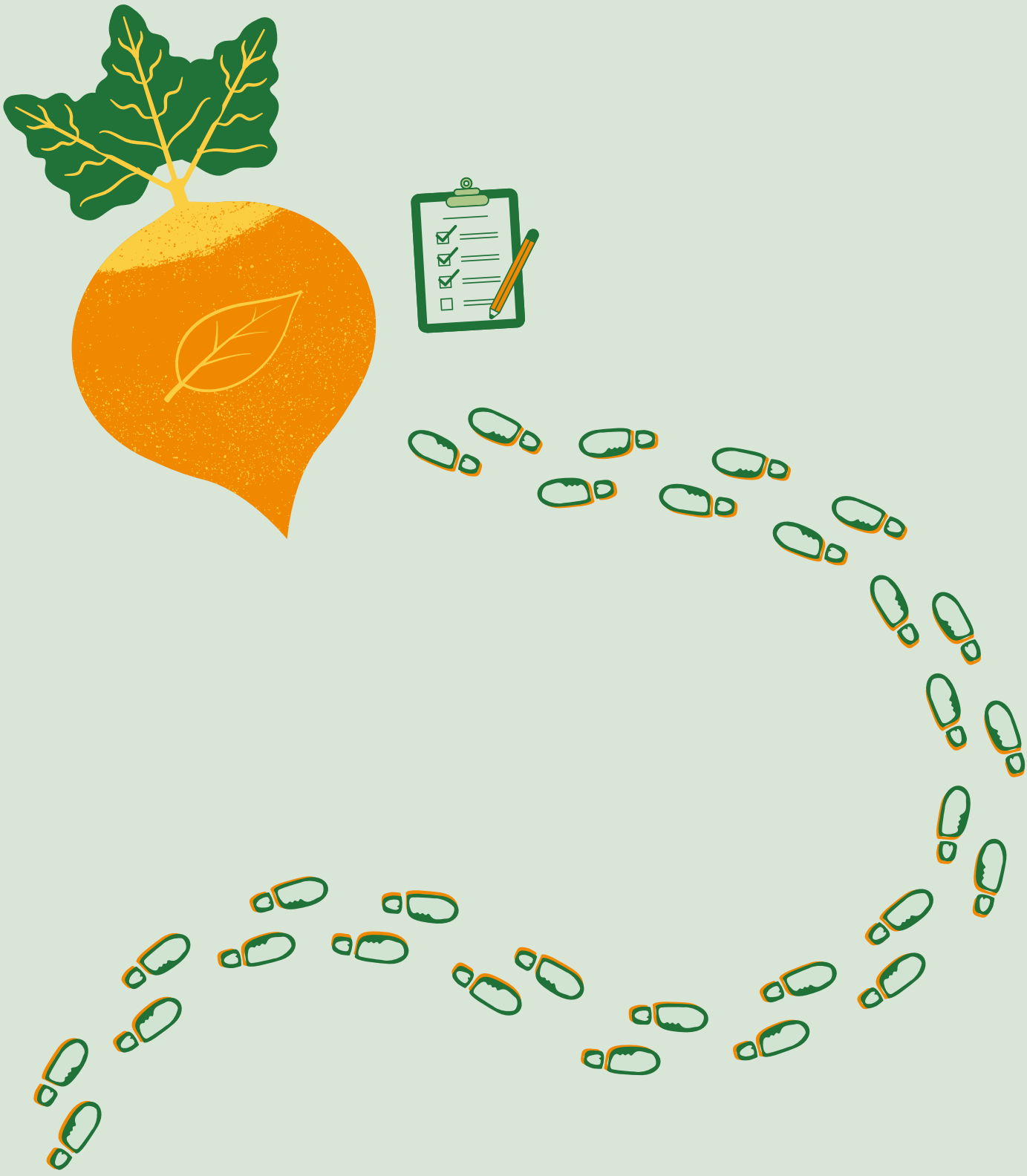
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3. Conversion to organic farming

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3. Conversion to organic farming

The conversion process is regulated in the EU Organic Farming Regulation 2018/848, but every farm is different and thus has to find its own way. This chapter gives insights into how to approach conversion. Keep in mind that there is support available at every stage; advisors, neighbouring farms, and farmers' organisations can be a great resource in time of need. You will find useful links in chapter → *6.4 Advisory services and farmers' organisations*.

3.1 Conversion in 10 steps

Although in reality some things may run simultaneously or the order may vary depending on the case, here is a possible step-by-step guide to conversion:

Orientation	**1. Involve family & employees**
	2. Learn about organic practices and structures
	3. Analyses of farm suitability
Planning	**4. Include advisory services**
	5. Develop a detailed conversion plan
	6. Decision-making
Becoming Organic	**7. Apply for grants**
	8. Sign a contract with a certification body
	9. Enter conversion period
Certification and control	**10. First control with farm assessment**

Step 1: Involve family & employees

If you are not a one-person business, it is seen as vital to involve others concerned early on, especially your family members and employees. Their openness to the principles of organic farming and their willingness to contribute to the process serve as important factors for long-term success. (LfL, 2021) Questions to clarify are, e.g.:

- Are the people you work with open to organic farming?
- What will a conversion to organic farming change for them?
- Are they open to training, new practices or new approaches to marketing?

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Step 2: Learn about organic practices and structures

To evaluate if going organic is the right fit for you, concrete knowledge of organic principles and their translation to practice is key. Possible resource are:

- This guide, online resources, books and journals, workshops and seminars
- Visiting organic farms with similar production branches
- Getting in touch with organic processors, cooperatives, and wholesalers
- Getting an overview about available advisory services
- Contact organic certification bodies: What conversion grants are available and how and when to apply for them?

Step 3: Analyses for farm suitability

Structural and economic factors to consider are as follows:

Economic stability of the farm?

The farm should be economically healthy and financial reserves should be available. But even though the conversion period has challenges, organic farming usually achieves a better profitability than non-organic enterprises. (Dierauer, 2021).

For details, see Chapter ➞ *5.1 Calculations of income, costs and profitability during conversion*

Need for investments?

A first thing to check would be if stables can be adapted to organic requirements at a reasonable cost. (oekolandbau.de, 2024) Also, it might be necessary to acquire different equipment for soil cultivation and mechanical weed control. (Dierauer, 2021) Costs may also arise for advisory services and certification fees.

For details, see Chapter ➞ *5.1 Calculations of income, costs and profitability during conversion*

Sufficient land?

This is especially important concerning the feed planning, due to the importance of self-sufficiency in feed supply under organic conditions (especially with possible initial yield reductions). Options are to adapt livestock numbers, to lease additional forage area, or to obtain a forage-manure co-operation with a livestock-free organic farm. (LfL, 2021)

Reserves in working capacity?

A working time balance sheet helps to analyse whether the available labour resources will be sufficient during and after conversion. In vegetable or speciality crop cultivation and in some specific animal husbandry methods, e.g. piglet production, a higher labour requirement is to be expected, while in other cases workers might even be relieved of some workload. (LfL, 2021)

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Marketing options?

Possibly the most important factor is the availability of marketing options for organic products. Clear and good purchase contracts for conversion and organic products are therefore a basis for an economically sound conversion. For the domestic market, the development of direct marketing can be an option, especially for farms close to urban areas. (Dierauer, 2021)

For details, see Chapter ➞ *5.2 How to remain economically sustainable during conversion*

Options for diversification?

Diversification is seen as a success factor for conversion amongst farmers: Diversified crops and farming activities as well as on-site processing, make farming activities more stable. At this point, first thoughts could be made on how to diversify production and income sources.

A glance at the current agricultural practices can be helpful to understand what would need to change under organic regulations:

Nutrient management & soil fertility?

When leaving synthetic fertilisers behind, oftentimes a new and more elaborate nutrient management strategy needs to be developed. What type of organic fertilisation (e.g. compost, manure and legumes) would be available and suitable for you? What practices (e.g. cover crops, rotational grazing) might be interesting to integrate?

Pest and weed control?

Organic farming builds on preventive measures, focusing on creating healthy ecosystems and promoting strong cultivars for natural crop protection. Strategies include using pest-resistant plant varieties, diverse crop rotations, and promoting habitats for beneficial wildlife. Direct interventions rely on materials from approved lists. How could you replace synthetic plant protection measures?

Animal husbandry?

Animals are a key element in the organic farm cycle idea, as they not only diversify the products but also refine the nutrient supply. For conversion, sourcing animals from organic origins or undergoing respective conversion periods, ensuring spacious housing for natural behaviours, feeding primarily organic feed, and maintaining health through preventive veterinary care need to be considered.

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Step 4: Include advisory services

At the latest for elaborating a concrete conversion plan and with financial budgeting, it is highly recommended to take advantage of conversion advisory services. Structures of advisory services differ in different EU countries, although there are efforts to unify them and improve the overall quality and accessibility.

For details, see chapter → *6.4 Advisory services and farmers' organisations*

Step 5: Develop a detailed conversion plan

A conversion plan should include:

- An appraisal of the farm (will be needed for controls!)
- A plan of the farming practices: soil and manure management, crop rotation, livestock type, numbers and management
- Labour requirements, infrastructure and equipment needs
- A marketing plan and financial budgeting
- A conversion timescale: Over at least 2 years for a single-step conversion (organicresearchcenter.com, 2025)

Step 6: Decision-making

1. Partial or full conversion?

Partial conversion to organic production may seem like an interesting option, especially for larger enterprises. However, in practice, there are challenges that arise from parallel organic and non-organic production, such as:

- Constraints on access to organic farming subsidies in some countries, e.g. Germany. Rules in other EU countries differ.
- Organisational and administrative burden due to strict separation of both systems (land, infrastructure, machines, storage, inputs, bookkeeping…).
- More complicated coordination with and intensified controls by certification bodies.
- **Organic associations** usually only accept fully converted farms.

A permanent partial conversion might still be sensible, e.g. if there are intensive or permanent crops (herbs, vegetables) that offer price advantages when they are produced organically, or for extensively managed grassland. (oekolandbau.de, 2024)

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2. Membership in one of the organic associations?

The production standards of **organic associations** are often more extensive than the **EU Organic Regulation** requirements. Still, a membership may offer advantages in terms of marketing and pricing (especially in direct marketing) as well as access to a strong network and support system.

See chapter → *6.4 Advisory services and farmers' organisations*

Step 7: Apply for conversion subsidies and support

With the start of conversion, you'll need to apply for available organic subsidies and support. (organicresearchcenter.com, 2025)

See chapter → *6.5 EU subsidies for organic farming*

Step 8: Sign a contract with a certification body

The conversion begins when the agricultural business registers with an organic certification body. This date is crucial for determining when products from the land can be sold as organic goods. (oekolandbau.de, 2024)

See chapter → *6.3 Administrative requirements for farmers*

Step 9: Enter conversion period

As mentioned above, the conversion begins when the agricultural business registers with an organic certification body. This is when agricultural practices need to comply with organic regulations, and the conversion period begins. The **EU Organic Farming Regulation** requires **conversion periods** of specific lengths for different production branches:

Conversion period for plant production

For plant production, the conversion periods are as follows:

- Annual or herbaceous perennial crops (cereals, root crops, field and fine vegetables, cut flowers), grassland → 2 years
- Perennial crops (like orchards, vineyards, and olive trees) → 3 years (oekolandbau.de, 2024)

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Month after conversion starts	Land	Marketing	Example	What happens?
0	Land is in conversion for 24 months	Non-organic marketing only	1 July 2026	Conversion starts
1 – 2			July / August 2026	Harvest
4			October 2026	Sowing of winter crops
9			March 2027	Sowing of summer crops
12			30 June 2027	First year of conversion completed
13 – 14		Yield can be marketed as “product from conversion to organic farming” or “conversion feed”	July / August 2027	Harvest
16			October 2027	Sowing of winter crops
21			March 2028	Sowing of summer crops
24			30 June 2028	Conversion completed
25 – 26	Land is fully organic		July / August 2028	Harvest
28		Yields from crops sown after 30/06/2028 can be marketed as “organic”	October 2028	Sowing of winter crops
33			March 2029	Sowing of summer crops
37 – 38			July / August 2030	Harvest

Table 3.1. *Example conversion timetable for arable farming. Adapted from oekolandbau.de (2024)*

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Conversion period for animal husbandry

Animal husbandry also needs conversion periods, in which livestock already needs to be reared according to organic standards. Two conversion models are common:

1. Simultaneous conversion of land and animal rearing → All pastures, forage areas and animals are converted at the same time over a period of 24 months. → Recommended for suckler herds and dairy farms that require major barn remodelling
2. Non-simultaneous conversion of land and animal rearing → Pastures and forage areas are converted first. Conversion of the animals begins as soon as the first own conversion feed is available.

Species and use	Conversion period
Cattle for meat production	12 months, but a minimum of ¾ of the lifespan
Milk-producing animals	6 months
Pigs for meat production	6 months
Poultry for meat production (broilers, turkeys, geese, ducks)	10 weeks if purchased till the 3rd day of life
Laying poultry	6 weeks if purchased till the 3rd day of life

Table 3.2. *Selected conversion periods in animal husbandry, adapted from oekolandbau.de (2024)*

Step 10: First control with farm assessment

The annual organic control usually follows prior notification, but unannounced spot checks are also possible. All operations of the farm are inspected, including an inspection of fields, pastures, stables and storage facilities and, if necessary, the production and sales facilities. In addition, harvest data is recorded and compared with the feed rations, storage, production and sales quantities and an extensive check of documents is conducted. Laboratory analyses of products are only conducted in individual cases, but it is checked thoroughly whether all the collected data is plausible. (Baumbach-Rothbart et al., 2025)

3.2 Lessons learned: consulting in conversion to organic farming in Thuringia (Germany)

The **German advisory system for conversion to organic farming** offers a wealth of insights into how structured, state-subsidised and knowledge-based advice can accelerate ecological change in agriculture. By revising its organic farming regulations, its support instruments and its well-coordinated advisory services, Germany has become one of Europe's leading countries in organic farming.

In principle, the agricultural offices are the point of contact for all questions relating to the conversion to organic farming. The advisors visit the farm or contact it by telephone to get an idea of the current situation and assess the opportunities and risks of conversion from a labour, economic and family policy perspective. State advisory services are free of charge. (LfL, 2021).

In addition to the advisory services provided by the federal states, there are agricultural associations that advise farms during the conversion phase and afterwards on all technical production and market issues. These include, for example, Naturland, Demeter, Gäa and Bioland. Initial visits are free of charge at most cultivation associations, and all further consultations are funded by the organic offensive or, in Thuringia, for example, by ELER funding (Rural development programmes of EU countries). The conversion consultants support agricultural businesses, processors and trading companies in their transition to organic farming. Their advice ranges from initial orientation and information to concrete implementation. The analysis and planning includes investment planning, decision on whether to convert fully or partially, advice on subsidies and control procedures, preparation for initial inspection, etc. To promote knowledge and acceptance of organic farming, consultants offer farm visits or training courses on organic farming for the farm employees.

What motivates farms to convert to organic farming?

Often, the main motivation for converting is that farm managers see a better market in organic farming. Another motivation is the generational change in farms, which sometimes makes conversion possible in the first place. Some farmers also see that their colleagues are successful with organic farming and are convinced by this. Or the marketer specifically asks for organic products (e.g. organic milk). Last but not least, increasing climate change and the associated environmental changes are also a reason for switching to organic farming, as it is more crisis-proof and offers better adaptation to climate change.

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What particular opportunities and challenges need to be considered when converting to organic farming?

First and foremost, the business completely reorients and repositions itself on the market. This offers a great deal of potential for innovation in order to tap into new markets, and also the opportunity for the company to contribute to nature conservation and environmental protection. The conversion to organic farming offers the opportunity to utilise regional value chains, as there is more cooperation with regional partners. This is usually associated with a higher image gain among consumers and in the immediate business environment.

Another opportunity is the conversion premiums and subsidies/investment aid associated with the conversion to organic farming, which are available almost everywhere in Germany. Organic farms are often more crisis-proof thanks to diverse crop rotation (in contrast to monocultures in conventional farming). On the marketing side, there is increasing demand for organic products as the organic sector in Germany continues to grow.

In addition to the many opportunities, there are of course also challenges involved in converting to organic farming. For example, the conversion costs money during the transition phase, as farms do not yet receive the full price for their organic products during this time. This means that higher costs are incurred during this period, but these can be partially compensated by the conversion premium.

Another challenge is that farmers have to deal with new topics, such as crop rotation planning, biological plant protection, soil cultivation, humus formation or new requirements for barn conversion. Marketing organic products is also a challenge, as it involves new marketing channels and methods. The internal acceptance of organic farming by employees should not be underestimated and must be well-supported and accompanied (e.g. through training). Finally, the transport, logistics and storage of agricultural products also require special conditions, which are often more complex than in conventional farming.

What should conventional farmers definitely bear in mind if they want to switch to organic farming?

The most important thing is that the farm management should have a personal interest in organic farming that goes beyond purely economic reasons for conversion. Sufficient working time should be allocated for all conversion processes (including new farm organisation). New partners must be found (e.g. for marketing). A rethinking is also necessary at the farm and process level, as organic farming is seen as a single entity (circular economy). Before farmers embark on the conversion process, they

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should draw up a viable business plan and secure financing during the conversion phase. The family and operational environment should be taken into account, and all those involved should be made aware of the goals of organic farming. In addition, it is important to exchange experiences and network with other organic farms, as well as to participate regularly in further training to stay up to date. When selecting crops, it makes sense to have a broad range and diversification in order to minimise the risks associated with the conversion.

Last but not least: Farmers and practitioners should seek advice during the conversion process and find reliable and competent support, e.g. from a conversion advisor from the farming associations. In principle, professional conversion advice from the farming associations commonly found in Germany is advantageous in order to avoid mistakes, to have a network, and to support the political representation of interests.

All information comes from the Interview with Ute Baumbach-Rothbart (Consultant of the farming association Gäa e.V.).

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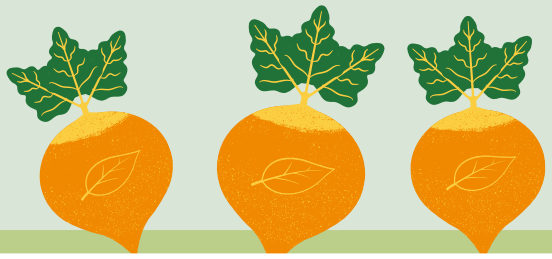
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4. Best practice examples and innovative approaches

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4. Best practice examples and innovative approaches

In this chapter, we present some best practice examples and innovative approaches from Germany, Hungary, Slovakia and the Czech Republic that complement organic farming, highlighting the good experiences, the challenges and the dealing with it in practice. The country-specific selection of the following examples and approaches was based on the participating project partners.

4.1 Best practice examples

The following best practice examples are complementary and inspirational, and are not part of the organic certification requirements and the conversion process. To make them more practical, the best practices are illustrated and accompanied by quotes from farmers.

4.1.1 Multiple benefits by feed and food: Szápár Ecofarm and Mill (Hungary)

Location & short profile

The family farm is located in Veszprém County, near the town of Zirc (47.325824-13768673, 18.03616802533196). It operates as a family-run enterprise engaged in arable farming, animal husbandry, and value-added processing through its on-site mill and bakery, with all products sold locally. The farm manages 85 hectares of arable land, where wheat, rye, oats, and maize are grown alongside various leguminous crops. Livestock production includes 55 beef cattle, 110 pigs, and 60 chickens. The business is run by a husband and wife, assisted by their three children, two of whom are actively involved in daily operations. Initially established in 1985 as a conventional farm, it began conversion to organic management in 2015 and has since been operated under certified organic practices.

Crop rotation and closed nutrient cycles

A well-planned crop rotation is the foundation of everything. Cereals are always overseeded in spring; for example, winter wheat is overseeded with Alexandria and Persian clover in spring. At harvest, the resulting straw serves as a good-value feed for the livestock, and immediately afterward, a “green carpet” continuously covers the land. This cover crop can even produce up to three growths by the end of the year.

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The manure left on the fields by the animals (as they graze directly on the arable land) decomposes differently compared to barn manure. There is never a patch of land left without vegetation – even weeds are useful because the animals graze on them. In fact, they are not truly weeds; although not intentionally planted, their presence does not threaten yields.

Variety selection is also essential. The cultivar should be best adapted to local conditions (land races play a significant role in this). Choosing tall-growing cereals is important, as they suppress other plants and are less susceptible to fungal diseases.

> *"There was a time when, due to cattle grazing so fertilizing and the associated fertilisation of the stubble fields, so much red clover appeared that we were able to harvest it – even though it hadn't been sown. I had to call the organic inspector to come and see for himself, because I couldn't otherwise prove where I had obtained the red clover seeds. It was the cattle who sowed them."*

Value addition through the concept of farmer-miller-baker

All raw materials produced are enhanced with added value in every possible way. Thanks to their own French stone mill, the farm processes the cereals on-site, grinding them locally and using them in their own bakery. All sales happen directly on the farm, and every product sells immediately.

The farm keeps cattle primarily for organic matter production – that is, to provide manure. Mangalica type of pigs (Hungarian breeds) and chickens consume low-quality grains, broken kernels, chaff fragments, and fruits from the orchard that are unfit for human consumption. Nothing goes to waste. Eventually, these animals are also processed and sold locally.

> *"We cannot produce enough to meet demand. Customers often ask us what else we have for sale."*

Challenges

The farm is crossed by a tributary of the Gaja stream. Taking advantage of this, seven pasture sectors have been established, each corresponding to a section of the stream. During severe drought periods – first occurring in 2022 – the streambed dried out. In 2023, this waterless period lasted even longer. Immediate action is needed to respond to global climate change. Measures must be taken to retain water, establish protective forest shelter belts, and undertake afforestation. There is no time to wait.

All facts and information included in this text were provided by Ferenc Palik.

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Figure 4.1., 4.2., 4.3., 4.4. *The soil is never bare: from organic wheat to stone-ground flour (Photo: Apolka Ujj)*

4.1.2 Adaptation to climate change through agroforestry: Werragut (Germany)

Location & short profile

The organic farm Werragut is located in the Werra valley near Eschwege (51.17500693145355, 10.108302883286916) and was managed conventionally until the 1990s. In 2009, the farm was taken over by the current owner and successfully converted to organic farming (Bioland). The annual precipitation is 620 mm, and the climate is characterised by regular spring droughts and late frost.

The farm has 20 ha grassland, 35 ha arable land and agroforestry as well as a husbandry (12 dairy cows, 1000 laying hens, 1000 broilers). At the moment there are 4 employees including 1 trainee.

Challenges in adapting to climate change

The area of the Organic Farm Werragut is characterised by regular spring droughts and increasing weather extremes, such as heavy rainfall and dry periods. There are regular late frosts (shift in frost dates), which caused the entire fruit harvest to fail in 2024. The mild winters also bring an increase in pests (especially mice). The long, deep frost of winter is missing, which means that soil fermentation no longer takes place in some cases. The animals (cows and chickens) have significantly more heat stress and need more shade.

> *"Simply carrying on as before won't work. Agriculture must adapt to the changing climatic conditions, e.g. by converting arable farming to perennial crops and planting agroforestry."*

In practice, the Werragut deals with these challenges by focusing on winter crops. This ensures better management of limited water resources throughout the year. In addition, the farm managers are increasingly focusing on mixed crops and integrated systems with annual and perennial crops to reduce the risk of crop failures due to climate change. Slug pellets and mouse traps are used in agroforestry to combat the increased pest infestation. There is a dedicated weather station on the site, which enables better climate analyses and forecasts.

> *"We need holistic eco-cultures on arable land. Here, agroforestry is an adapted system."*

Agroforestry with energy and valuable wood is a good complement to other crops, even if it is not suitable for every farm. Agriculture needs to be rethought, and long-term strategies for climate adaptation are needed instead of short-term technical solutions. For example, the Werragut has drawn up an agroforestry plan. The agrofor-

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estry areas help to bind CO_2 through the woody plants and build up humus. They also help to adapt to climate change by protecting against wind, erosion and evaporation.

Furthermore, the compost from the cows and chickens is used for nutrient management. A broad crop rotation is used, as well as winter and summer arable farming. Ploughless cultivation makes a difference, especially in dry years. The agroforestry system with its trees and shrubs is intended to provide shade for animals and plants in the future. A drip irrigation system has been installed for water management, and in the future, rainwater from the roof areas will also be used for irrigation.

In animal husbandry, the following climate adaptation measures are being taken:

- Outdoor drinking troughs for mobile hens
- Ventilation in stables
- Planting of runs (for broilers)
- Grazing takes place mainly at the edge of the forest
- Cattle are moved in the morning and evening to avoid unnecessary heat stress

In climate adaptation and dealing with climate change, farm manager Julius Nennewitz has the following advice for farms that want to switch to organic farming:

> *"It's important to always look at the local conditions. It is helpful to look at climatic forecasts and ask yourself where the farm should develop in the future. Based on these findings, individual decisions can be made for your farm."*

Visions for the future of the farm

The Werragut team's vision for the future is a farm without broilers in 10 years' time (for ethical reasons). The agroforestry areas will be significantly expanded and developed to such an extent that the crops grown will be used for direct marketing in the farm's own café and bakery (e.g. walnut fig bread). The cooperation between TRIEBWERK (agroforestry consultancy), ReSoLa e.V. (Regenerative and Social Farming Association) and the Organic Farm Werragut has been deepened and institutionalised and has become routine. In the future, the Manager of the Werragut sees the farm as a teaching and learning centre for agroforestry. The varieties, species and cultivation techniques are being further developed, and the energy cycles on the farm are being utilised even more effectively and independently. Water management is properly structured, and real nutrient cycles are optimised. The educational work on agroforestry has been expanded, and the positions of the Regenerative and Social Farming Association are self-financed and independent of donations.

All facts and information included in this text were provided by Julius Nennewitz.





Figure 4.5., 4.6. *Agroforestry with walnuts and figs on the organic farm Werragut (Photo: Achim Franko)*

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4.1.3 Community-supported agriculture meets social farming: Ekozahrada Raková Farm (Czech Republic)

Location & short profile

The farm is located in Rokycany, Western Bohemia, Czech Republic (49.700955659048, 13.581750496705938). It operates as a public benefit institution and is jointly managed by three nonprofit organizations – MOJE JAKO TVOJE, MOŽNOSTI TU JSOU, and Statek Raková – all adhering to social economy principles. The garden covers approximately 1 hectare, cultivating around 50 varieties of vegetables, herbs, and limited fruit. Processing activities include drying herbs for tea and basic vegetable and fruit processing. The farm employs about 30 individuals with health challenges, offering meaningful work opportunities. Situated at an altitude of 400–500 metres with an average annual precipitation of 550 mm, the area features brown soils with loamy to loamy-sandy texture. Established in 2018, the farm has been managed according to permaculture and organic farming principles and achieved organic certification in 2021. It is recognized as the first community-supported agriculture (CSA) initiative in Western Bohemia.

The Ekozahrada Raková is an example of a successful and growing concept within community-supported agriculture, which largely bases its success on increasing self-sufficiency and circularity. An innovative element is the integration of organic and social agriculture, where the farm leverages the strengths of both concepts to achieve maximum efficiency. Social agriculture offers enough labour for manual work associated with growing vegetables and fruits in smaller volumes, but a high diversity of cultivated species and varieties. At the same time, it creates additional added value for farm products and further motivation for community members purchasing from the Ekozahrada Raková.

Challenges

During its operation, the Raková Ekozahrada faces a number of challenges common to community-supported agriculture (CSA), as well as specific challenges. The Ekozahrada Raková started in 2018 with a small team of workers (5 people with disabilities) and a few flower beds. Still, it has gradually grown and now employs around 30 people (with various types of disabilities and without disabilities). Initially, it overcame the typical barriers associated with building a community and gaining customer trust for a CSA.

> *"Consumer expectations within the CSA do not always match reality, as some consumers have very high, sometimes unrealistic, demands for the variety and regularity of fruit and vegetable supplies and are not always satisfied with seasonal and climatic fluctuations."*

A specific challenge that the Ekozahrada Raková faces, as an organic farming entity, is the need for increased care for the soil and plants without the use of agrochemicals. Compost is also used to a large extent as part of plant nutrition, but in the Czech Republic, there is a shortage of compost in a quality suitable for certified organic farming. Therefore, the farm specialises in producing its own compost, which also solves the problem of managing plant waste. Another challenge is the lack of seedlings and seeds certified for organic farming.

For many species and varieties of less common types of vegetables, seeds and seedlings are missing, certified for the system of organic farming, which is partially solved by using farmers' seeds, but mainly by purchasing them from nearby Germany.

A specific challenge related to the concept of social farming, applied at the Raková Ekozahrada, are problems with worker logistics. Similar to other farms and workplaces in the countryside, accessibility by public transport is impaired here; the farm mainly employs people with various types of disabilities, and not all of them can travel on their own. Ensuring the collection proves to be economically demanding, therefore, this problem is solved by emphasising the independence of the workers included in the team.

> *"Limited public transport access creates significant logistical challenges for employing workers with disabilities in rural social farming settings."*

All facts and information in this text were obtained from an interview/conversation with the farm personnel and additional information from the official website www.ekozahradarakova.cz/

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Figure 4.7., 4.8. *Harvest and fresh vegetable basket from Ekozahrada Rakova (Source: www.ekozahradarakova.cz/)*

4.1.4 Farming in mountainous areas: Liptovská Teplička agricultural cooperative (Slovakia)

Location & short profile

The agricultural cooperative operates in the Poprad district, in a mountainous area at an altitude of 900–1400 m above sea level (48.97760696912334, 20.09652615767212). Its legal form is a Shareholders Cooperative, and the Chairman of the Board and Director of the Cooperative is Ing. Stanislav Michalica. The total area of cultivated agricultural land is 1,188 ha, of which arable land represents 70 ha, and the rest consists of permanent grasslands.

In crop production, the cooperative focuses on growing winter wheat, triticale, winter barley, oats, potatoes, and clover-grass mixtures. In animal production, it is engaged in cattle breeding (360–400 head) and sheep breeding (650–700 head).

For processing its own production, a dairy and slaughterhouse certified in the organic system have been established. The farm employs approximately 40 workers.

The enterprise entered trial conversion on approximately 100 ha in 1991. In 1995, the entire farm area and all animal production entered conversion. Since 1997, the farm has been fully converted to organic production. According to the register, Liptovská Teplička Cooperative was the 14th farm in Slovakia to join the organic system and is currently the second oldest organic farm registered in the country.

> *"We conduct organic certification annually. The entire plant production, animals, all dairy products and meat is certified."*

Challenges of management in mountainous areas

> *"The natural conditions we farm in predetermine our focus on livestock breeding, especially cattle breeding without market milk production and sheep farming."*

Cattle graze during the summer season on pastures located between 1000 and 1400 m above sea level. Dairy ewes graze near the farmyard as they are milked twice daily.

> *"The biggest challenge in animal production is securing sufficient feed, especially in dry years."*

Climate change is noticeable even in mountainous regions, with drought affecting both spring and summer periods. Since industrial nitrogen fertilizers cannot be used, producing enough forage can be difficult. This is addressed by regularly overseeding permanent grasslands with clover-grass mixtures to increase the share of legumes and enhance nitrogen fixation in grasslands. This approach has stabilized forage

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production so far. During the summer, sometimes water for grazing animals must be imported.

> *"Farming in mountainous areas is becoming increasingly financially and risk-intensive."*

In plant production, ploughing is the basis of agrotechnics. The cooperative is aware of its pros and cons, but attempts to minimize soil tillage, especially for fodder crops, were unsuccessful, as established stands were weaker and yields lower. Ploughing has also proven effective for weed control. Potatoes are regularly ridged to reduce weeds. A key factor in protecting potatoes against pathogens is planting tolerant and resistant varieties and using appropriate approved preparations.

> *"A challenge in plant production is the shortage of quality organic seeds, so we try to source them abroad or apply for legislative exceptions for conventional seeds."*

The cooperative's economic situation has been improved by building a short supply chain – processing own production to create added value. When the farm produced and sold live animals and raw sheep milk, buyers were not willing to pay higher prices for organic products. Therefore, between 2008–2010, facilities for processing sheep milk and a slaughterhouse for animals were built. Since 2011, all sheep milk has been processed into organic sheep products and sell organic beef, veal, sheep, and lamb meat. This ensured the sale of organic production at higher prices. Another part of business is operating the Dolinka Guesthouse, offering restaurant and accommodation services, with wellness and bowling facilities as part of the guesthouse.

> *"We have been engaged in organic farming for almost 30 years. This form of farming is demanding, but manageable, and it is possible to achieve respectable results in both plant and animal production. Benefits include building short supply chains, focusing on quality, and appropriate marketing of production. It is essential to apply new knowledge and practices to cope with the limitations inherent in the organic farming system."*

All facts and information included in the text were provided by Ing. S. Michalica. Further information: www.ppdteplicka.sk









Figure 4.9. – 4.12. *Fields and animals of Cooperative (source: www.ppdteplicka.sk)*

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4.2 Innovative approaches

The following approaches represent philosophical frameworks and practices. These are not protected or regulated terms but complementary practices to organic farming. They are future-oriented tools to strengthen ecological and economic farm resilience, but they are not relevant for conversion to organic farming.

4.2.1 Regenerative organic farming

The philosophy of Regenerative Agriculture (RA): Regenerative agriculture aims to restore long-term soil health through practices like minimal soil disturbance, continuous soil cover, living roots, diverse rotations, and livestock integration. These methods boost soil life, water retention, and nutrient efficiency, improving the farm's ecological and economic resilience. The regenerative mindset goes beyond sustainability by aiming for the active restoration of agricultural ecosystems.

Aligning the core philosophy of Organic Farming with RA: Organic farming shares key principles with RA and uses practices such as green manure, compost, cover crops, and crop rotations – all central to regeneration. Most regenerative methods fit within organic regulations, thus, an increasing number of organic farmers are integrating these techniques, sometimes without explicitly labelling them as "regenerative." In this sense, the organic and regenerative approaches do not exclude, but rather complement each other.

Challenges of Regenerative Organic Agriculture: Integrating organic and regenerative practices is promising but challenging. Weed control with reduced tillage, maintaining or terminating cover crops – especially during drought – can be difficult in chemical-free, organic regenerative systems. Although herbicides are allowed in regenerative farming, alternatives such as frost-sensitive cover crops, mowing, or roller crimpers exist. Regenerative practices also require specific machinery and expertise that not all farmers have. RA represents a principle-based, open-ended approach that currently lacks a unified certification or regulation system. This may present difficulties for organic farms that are bound by strict standards and controls. Therefore, it is crucial to develop clear guidelines and good practices that help farmers navigate between the opportunities and limitations of both systems.

Experiences and practices of a regenerative farmer transitioned to Organic Farming

The practices of a regenerative farmer who has transitioned to organic farming clearly demonstrate that the two approaches, though emphasizing different aspects, com-

plement each other well. The farm's methods are based on key regenerative principles as follows:

Minimal soil disturbance: The farm practices reduced tillage, minimizing soil disturbance through no-till and direct seeding methods. However, due to the requirements of the agro-environmental Scheme (AKG supporting programme), shallow incorporation of green and organic manure using disc harrows has become necessary. Soil health is improved by living plants, continuous mulch cover, and natural pest control without chemicals. Root biomass and plant residues left on the surface improve water infiltration and retention, promoting sustainable water management. The farm conducts precision soil sampling (down to 150 cm) and soil mapping by soil type to optimize the retention of organic matter – for example, by keeping their own straw on the surface as mulch or using cattle as "mobile composters" via grazing or placing feed bales directly on arable land. The benefits of minimal soil disturbance include fuel savings, reduced soil compaction in the long term, and enhanced system diversity and resilience.

Permanent soil cover: The soil is covered with straw, crop residues, and cover crops. These are kept in the field as long as possible to support soil life and worm populations. While specific studies have not yet been conducted, it is visibly clear that nature is reviving, soil activity has increased, and earthworms are consistently present. Mulch also slows down soil drying, benefiting soil organisms. Soil cover protects against splash erosion, improves water infiltration, moderates soil temperature fluctuations, and suppresses weeds. A thick mulch layer can hinder crop emergence and complicate mowing or windrowing, so the farm uses livestock for grazing instead of mowing. Without soil disturbance, weed seeds remain buried and deprived of light, reducing germination. Grazing animals can also help control weeds such as *Sorghum halepense* (Johnson grass).

Diversity: The farm employs polyculture even in the case of cash crops, for example, planting peas and flax with wheat. The farmer frequently mixes cover crops from over ten species, creating their own blends. These mixed plantings draw nutrients from different soil layers and help mobilize nutrients. Tree lines, wetlands, deadwood, and log piles are maintained to protect local wildlife. The farm uses local breeds and native animal species whenever possible. Livestock integration strengthens the system's circularity, as manure decomposes directly on arable land and returns to the soil. The AKG programme and other subsidies are used to support biodiversity, offering long-term economic advantages as well.

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Figure 4.13. *Mixed cash crops. Source: Apolka Ujj*
Figure 4.14. *Grazing of cover crops. Source: Apolka Ujj*

Permanent root presence: Sowing takes place immediately after harvest to maintain living roots that improve soil structure and enhance carbon sequestration. Roots penetrate to various depths, improving nutrient uptake and loosening the soil, while their decomposition improves water retention by increasing infiltration. Maintaining permanent root presence is not without challenges, especially after harvest or grazing, when waiting for new growth is required. To protect the plants, timely sowing and planned grazing are key.

Integrating animals into crop production: The core idea is to grow cover crops between main cash crops, which are then grazed mainly by cattle. These animals act as "self-moving composters," enriching the soil with organic manure as they graze, which boosts biological activity and microbial diversity. Animal presence accelerates soil regeneration, aids weed control, and supports natural pest regulation. Manure is not collected separately but deposited directly on the land, eliminating the need for external inputs and transport. Natural manure enhances microbial life far better than synthetic fertilizers, contributing to long-term soil health.

All facts and information included in this text related to the practical approach were provided by the farmer, Mátyás Bekecs.

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4.2.2 Community Supported Agriculture (CSA)

Community Supported Agriculture represents a new approach to the relationship between farmer and consumer. The farmer and the community of local supporters are equal partners. They enter into an oral agreement or a contract in which the farmer commits to growing the agreed-upon crops and the members commit to purchasing them, while sharing the risks of crop failure or natural disasters. Consumers usually pay for the produce in advance. In return, they receive regular shares of food throughout the season, with the composition depending on the time of year and the harvest. This partnership fosters local production and local consumption, minimises costs associated with packaging, and actively contributes to the sustainable production of food.

A Camphill community working with the CSA approach in the Czech Republic

Camphill na soutoku, z.s. was from the beginning established as a "confluence" of the social impulse with the principles of biodynamic agriculture. The initiative is located in the locality of České Kopisty, CZ. Within this context, Svobodný statek na soutoku has been entrusted by the local community with activities specifically related to landscape stewardship. As a public benefit corporation, however, it also pursues a wider range of educational and awareness-raising objectives. Its activities form part of the work of the Camphill community in České Kopisty and therefore also have a social dimension. The intention is the renewal of the landscape, of society, and of the role of the farmer within them; the formation of a free holding farm based on the principles of biodynamic agriculture; the creation of a space for work, learning, and social encounters on the farm; to act and to shape the work with a sense of beauty and truth; and to continue the initiatives and work of Rudolf Steiner and Karl König.

The team consists of several circles of people. The core team is made up of those who live on the farm, some of whom are co-workers of the public benefit corporation and some volunteers. Other "circles" include permanent co-workers, seasonal co-workers, volunteers, and 7–10 people with special needs within the social services coordinated by Camphill na soutoku, z.s.

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The farms' intentions are to:

- Restore the health of the landscape, society, and the role of the farmer within them,
- Establish a free-holding farm based on the principles of biodynamic agriculture,
- Create a space for work, learning, and social encounters on the farm,
- Act and shape the work with a sense of beauty and truth,
- Built upon the initiatives and work of Rudolf Steiner and Karl König.

How the CSA of Camphill na soutoku works?

Each group has its own coordinator. The coordinator brings the group together (comprising at least 10 members), represents it in communication with **Svobodný statek na soutoku**, ensures its smooth operation, and oversees payments. In return, the coordinator receives up to a 50% discount on their share.

A person becomes a member once they confirm their participation in the season with the coordinator and send proof of payment (e.g., a screenshot). Deliveries of vegetables during the primary season take place once a week or once every two weeks on an agreed day. The farm requires the arrangement of a collection point where the vegetables can be unloaded, and the crates stored until the next delivery. The collection point also receives a 50% discount on its share. In addition to the vegetable share, customers may order extra vegetables, fruit, herbs, jams, and other products from the online shop, beyond the scope of their share. During an average season, the farm guarantees 9 types of vegetables per delivery.

Pricing options

Reduced price: This option is intended for members who, for various reasons, cannot afford the standard share price. They may be caring for children or other family members, dependent on your support. They may have medical expenses not covered by insurance, educational costs, be receiving financial assistance, or be a senior with limited savings. This price covers the cost of the vegetables produced and contributes to the wages of the co-workers.

Standard price: This option is suitable for members who are financially secure and can afford the standard share price. They may be employed, likely own an apartment, and take regular holidays. Thanks to their education or skills, they have a good chance of securing well-paid employment. This price covers the regular operating costs for the CSA season, seed and seedling purchases, wages for co-workers, season management, and minor development.

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Figure 4.15. *Source: https://www.svobodny-statek.cz/bio-dynamicke-zemedelstvi*

Supporter's price: This option is for members who own a house, have investments, inherited funds, or other financial reserves, and may not need to work full-time. This price enables the farm to pay bonuses to its co-workers and to carry out their educational activities, teaching children, youth, and adults; caring for animals on the farm; and landscape stewardship.

Frequency	Reduced Price	Standard Price	Supporter's Price
Once a week	CZK 12,500	CZK 14,000	CZK 15,000
Once every 14 days	CZK 7,000	CZK 8,000	CZK 10,000

Table 4.1. *Summary of pricing list*

All facts and information in this text were obtained from an interview/conversation with the farm personnel and additional information from the official website https://www.svobodny-statek.cz/bio-dynamicke-zemedelstvi/information-in-english

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Figure 4.16., 4.17, 4.18. *Vegetables and produce from the CSA Svobodný statek na soutoku, z.s. Source: https://www.svobodny-statek.cz/bio-dynamicke-zemedelstvi*

4.2.3 Agroforestry and Key Line Design

What is agroforestry?

The term agroforestry is used for land use systems that combine trees or shrubs with arable crops and/or livestock in a way that creates benefits between the components (Nair, 1993). Recently, there has been a burst of innovation resulting in elaborate systems which combine modern agricultural systems with agroforestry elements. One example is "alley-cropping", in which farmland is interspersed with tree strips while still allowing machines to operate in between. Like that, it becomes possible to maximise the ecological and economic benefits.

Benefits of agroforestry

Research has demonstrated many benefits that may arise from the integration of trees and shrubs into the farmland, especially for climate adaptation. But there are also economic benefits that may arise over time. The following table shows an incomplete list of benefits:

Benefits for landowners and farmers	Environmental benefits
Reduction of soil erosion	Increased structural and habitat diversity (woody structures and fringe areas as habitat)
Increased soil fertility (more closed nutrient cycles, humus build-up)	Increased biodiversity
Reduction of fertiliser/pesticides use	Promotion of beneficial organisms
Positive yield effects and higher yield stability for annual crops due to an improved microclimate and protection against adverse weather conditions	Creation of retreat areas for wildlife
	Extensification of agricultural production
	Reduction in the run-off of substances from agricultural land into ground and surface waters
Expansion of the agricultural product range (product diversification)	Sustainable production of wood
Better seasonal distribution of labour peaks (mainly in winter)	

Table 4.2. *Benefits of agroforestry. Adapted from DeFAF (2025).*

Economic aspects

On the one hand, integrating agroforestry represents a diversification of products which can be expected to increase the overall yield per area while promoting the overall resilience of the system. On the other hand, the planning and realization of agroforestry represent a major initial investment of time and money (Boehm et al., 2020).

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Since trees take time, revenues from the yields come with a delay. Also, funding and subsidies for agroforestry are still in their infancy and vary from country to country.



Figure 4.19. *Schematic illustration of an alley-cropping system. (own graphic)*

How to approach agroforestry on your farm

One general recommendation on approaching agroforestry is to start with a smaller area and gradually increase with time. This keeps initial investments manageable and allows integrating the accumulated experience in the subsequent design. Mostly three approaches are discussed: short rotation coppice, high value timber and fruit or nut trees. All have their own advantages and disadvantages (and not all of them get subsidies in every country). The following table shows the three systems in comparison.

	Short rotation coppice	High value timber	Fruit trees/nut trees
Initial investment	++	+	+++
Maintenance			
– Young tree / initial effort	(+)	+	++/+++
– Older trees	0	(+)	+
Yield	Periodically (Every 3 – 5 / 8 – 12 years)	Once: End of the rotation period	After initial phase continuously
	+/++	++	+++
Maintenance influence on yield	+/++	+	++/+++
Rotation period	20 – X years	40 – 140 years	50 – X years
Nutrient inputs	0	0 / (+)	++
Work peaks	Winter	Winter	Year round – autumn/winter

Table 4.3. *Simplified comparison of three different tree crop options for agroforestry (ReSoLa e.V.)*

Key Line Design

The term Key Line Design, originally invented by P. A. Yeomans in the 20th century, refers to a landscape design system which focuses on water management. The main goal is to structure the land in a way that works with the natural topography to slow, spread and sink the water into the soil. By this, it aims to mitigate the impact of heavy rainfalls, floods, soil erosion and even drought.

Key Line Design works by implementing structures, like e.g. strips of deep ploughing, trenches, or agroforestry strips, following the so-called "key lines" which are natural contour lines where water can be most efficiently directed. The modern approach to Key Line Design has developed greatly, adapting the technique to the specifics of European land use regulations as well as integrating modern measurement technology, remote sensing and hydrological modelling.

How key lines contribute to organic farming and agroforestry

In modern agroforestry systems, oftentimes lines of trees are planted following key lines at a distance that still allows for work with agricultural machinery in between (alley cropping). By this, the benefits of agroforestry and Key Line Design add up, developing a system which can ideally provide high yields, protected soil, optimised water management, beneficial microclimates and heightened biodiversity all at once. The combination of agroforestry with Key Line Design thus represents a low-tech, systemic approach to adaptation to a changing climate which, once implemented, can be harvested for years to come.

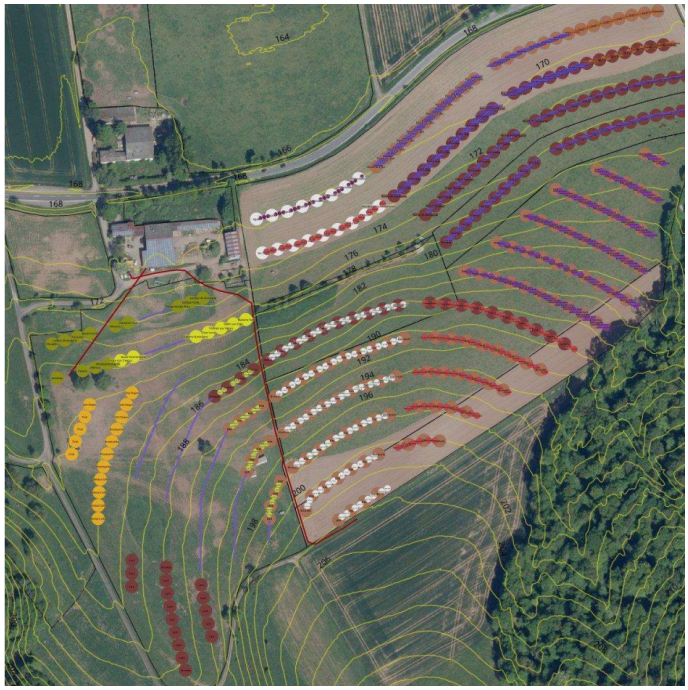


Figure 4.20. *Planting plan of fruit and nut trees at the Werragut in Eschwege. Tree strips follow key lines for optimal water retention. Courtesy of ReSoLa e.V.*

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4.2.4 Precision robotics and GPS for weed management in organic farming

As organic farming prohibits synthetic herbicides, innovative technologies are essential for effective weed management. One of the most groundbreaking advancements in this field is the integration of precision robotics and GPS technology to control weeds efficiently and sustainably. For instance, a vegetable grower in France reported reducing manual labour by 50% after integrating a robotic weeder equipped with AI-based plant recognition. The robot autonomously worked between crop rows, identifying and removing weeds without supervision (Pradel M. et al. 2022).

Robotic weeders equipped with artificial intelligence and GPS navigation can autonomously detect and remove weeds without harming crops. These machines use cameras, sensors, and machine learning algorithms to distinguish between crops and weeds, enabling precise mechanical or thermal weeding. Unlike traditional methods, robotic systems reduce labour costs and increase efficiency while minimizing soil disturbance.

In a recent trial on an organic grain farm in Germany, GPS-enabled mapping helped the farmer apply localized mechanical weeding only where weeds were detected, leading to a 30% reduction in fuel use and minimal disruption to soil structure (Shamshiri, R. R. et al. 2024).

GPS technology further enhances weed management by enabling precision farming techniques such as site-specific weeding. By mapping weed infestations and applying targeted control measures, farmers can optimize resource use and avoid unnecessary interventions. This approach significantly reduces soil compaction and enhances overall soil health, which is crucial for organic farming systems.

An organic lettuce farm in California reported that using the Oz robot reduced weeding time by 70% and allowed farmworkers to focus on harvesting and quality control rather than tedious manual weeding. **Naïo Technologies' Oz** is a lightweight, solar-powered robot that assists small-scale organic farmers in mechanical weeding without damaging crops. Many modern robotic weeders are powered by renewable energy sources, particularly solar panels, making them even more sustainable. For example, the **Solar Weeder** by EcoRobotix operates autonomously using solar energy, scanning fields and precisely targeting weeds with micro-doses of organic herbicides or mechanical removal techniques (naio-technologies, 2025; ecorobotix 2025).

Another innovative example is **FarmWise's Titan**, which utilizes AI-powered vision systems to remove weeds mechanically without the need for chemical inputs. Such advancements not only enhance sustainability but also contribute to reduced operating costs and improved long-term soil health.

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In pilot programmes across U.S. vegetable farms, Titan robots have shown an ability to eliminate up to 90% of in-row weeds in crops like broccoli and cauliflower, significantly reducing the need for follow-up manual labour (Shamshiri, R. R. et al. 2024).

Precision robotics and GPS technology offer an innovative and sustainable solution for weed control in organic farming. By integrating these advanced tools, farmers can maintain weed-free fields while preserving soil health and reducing environmental impact. At present, precision robotics and GPS technology still require significant investment and are generally more suitable for established farms. Furthermore, their use depends on the size of the farm and the type of crops grown. Nevertheless, as technology continues to evolve, automated weed management can play a crucial role in the future of organic agriculture, making farming more efficient, eco-friendly, and productive.

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4.2.5 Biochar as a soil amendment in organic crop production

As organic farming evolves to meet the growing demands of sustainability, resilience, and food security, a wide range of innovative practices and inputs are being adopted. These include not only technological advancements, but also nature-based solutions that are implemented in new and more effective ways. Examples such as biochar, compost enriched with beneficial microbes, green manure, rock dust remineralization, mycorrhizal fungi inoculation, and integrated mulching and cover cropping systems represent innovative strategies that improve soil fertility, reduce environmental impacts, and increase crop resilience. These methods combine traditional ecological knowledge with modern scientific understanding, offering powerful tools for the future of organic agriculture. One of the most promising innovations to address these challenges is the use of biochar as a soil amendment. Biochar is a carbon-rich material produced through the pyrolysis (thermal decomposition in the absence of oxygen) of organic matter, offering multiple benefits to soil health, crop productivity, and climate resilience.

Key benefits of biochar in organic systems

One of the primary advantages of biochar is its ability to improve soil structure. Its porous nature enhances water retention, helping reduce the impact of drought and irregular rainfall on crops. This is particularly useful in sandy or degraded soils with low water-holding capacity.

Furthermore, biochar acts as a reservoir for essential nutrients, preventing leaching and making them more available to plants. The high cation exchange capacity (CEC) of biochar allows it to retain nutrients like potassium, calcium, magnesium, and ammonium.

Biochar also plays a crucial role in enhancing soil microbial activity. Its stable carbon structure provides habitat for beneficial microbes, including nitrogen-fixing bacteria and phosphorus-solubilizing organisms. This leads to improved nutrient cycling and stronger plant health. Moreover, biochar contributes to carbon sequestration, locking carbon in the soil for hundreds to thousands of years and helping reduce atmospheric greenhouse gas concentrations. Furthermore, long-term benefits are increased soil organic carbon, reduction in fertilizer requirements, enhanced crop resistance to diseases due to improved root health and soil biodiversity and stabilization of soil pH in acidic soils.

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Practical applications in organic farming

If biochar is incorporated into the soil without prior treatment, it can initially absorb and bind water and nutrients from the surrounding environment. In the short term, this can lead to a reduction in nutrient availability for plants and inhibit growth. To receive the positive effects of biochar, it is crucial to 'charge' it before application, which means to enrich it with nutrients. To do this, it must be combined with organic fertiliser. Only then can it fulfil its role as a long-term reservoir of soil nutrients.

Vegetable production: Organic vegetable growers often apply biochar to improve root zone aeration and nutrient availability. A study by the Rodale Institute demonstrated that integrating biochar with compost increased tomato yields by up to 30% and improved fruit quality. Farmers typically apply biochar at rates of 5–20 tons per hectare, depending on soil type and crop needs.

No-till and cover cropping systems: In regenerative no-till systems, biochar can be applied in strips or broadcast before cover cropping. Combined with green manures (e.g., clover, vetch), it enhances soil organic matter and biological activity. Cover crops benefit from the improved nutrient and moisture environment, increasing biomass and root exudates that further stimulate microbial populations.

Orchards and vineyards: Biochar has demonstrated benefits in perennial systems like apple orchards and vineyards by enhancing soil water retention, improving root–soil contact, and reducing nutrient leaching. In Italian Vitis vinifera vineyards, a rhizobox study by Beatrice et al. (2024) showed that orchard-pruning biochar increased soil moisture during summer and stimulated earlier root growth. García-Jaramillo et al. (2021) confirmed increased bioavailability of carbon and nitrogen, and the concentration of plant-available micro and macro nutrients.

Synergistic soil amendments in organic systems

In addition to biochar, several other natural amendments complement its effects:

- **Compost**: Enhances microbial diversity and provides a readily available nutrient source. Pre-charging biochar with compost or compost tea improves microbial colonization.
- **Green manures**: Leguminous cover crops like Alfalfa (*Medicago sativa*) and clover fix atmospheric nitrogen and add organic matter to the soil. Biochar improves their decomposition rate and nutrient release.
- **Rock dust** (e.g., basalt, granite): Supplies trace minerals like silica, calcium, and magnesium. When combined with biochar, it can buffer soil pH and improve nutrient release over time.

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- **Mycorrhizal fungi**: These fungi form symbiotic relationships with plant roots, enhancing phosphorus and water uptake. Biochar provides a protective refuge for fungal spores, improving their establishment.
- **Mulches and cover crops**: Reduce soil temperature fluctuations, suppress weeds, and protect soil life. When biochar is applied underneath mulch layers, it helps reduce evaporation losses and supports moisture retention.

There is still considerable debate regarding the use of biochar in agriculture. Alongside the benefits described, there are still many unanswered questions and a need for further research concerning its use for soil improvement. Issues raised include high production costs, inconsistent research results and, not least, the risk of contaminant introduction.

Biochar can represent a powerful tool in the organic grower's toolkit. Its ability to improve soil structure, retain nutrients, support microbial life, and sequester carbon makes it a cornerstone of sustainable agriculture. When combined with other amendments like compost, green manure, rock dust, and mycorrhizal fungi, biochar contributes to a more resilient, productive, and sustainable farming system.

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5. Economic and marketing aspects

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5. Economic and marketing aspects

This chapter provides a practical overview of the economic and marketing parameters involved in organic conversion. It focuses on central financial concerns, including production costs, investment requirements, and available subsidy instruments, alongside effective marketing strategies for organically produced products. By highlighting real-world challenges as well as potential opportunities, the chapter aims to equip producers and practitioners with relevant tools and information to navigate the economic realities and market demands associated with converting to organic farming. In addition to general analytical insights, the chapter draws on illustrative examples from the Czech Republic to demonstrate how economic and market conditions influence organic conversion in practice. These examples reflect national policy settings, market structures, and farm-level experiences, and are used to contextualise broader findings rather than to present universally applicable outcomes. By grounding the discussion in the Czech context, the chapter offers concrete reference points that can support decision-making while acknowledging regional variability across the EU.

5.1 Calculations of income, costs and profitability during conversion

Conversion to organic farming is a three-year period in which the farm must follow organic rules, yet cannot sell its products as fully certified organic. This creates a temporary "yield–price gap": yields typically fall by 10–20%, while prices remain at conventional levels. A realistic financial picture therefore depends on a detailed cost structure and conservative revenue assumptions.

Methodology for cost breakdown

Understanding three cost categories is essential:

- **Variable Costs (VC)**: Fuel, seeds, fertilisers, plant protection – costs that change with production volume.
- **Fixed Costs (FC)**: Certification, depreciation, insurance, bookkeeping, machinery servicing – costs that remain constant regardless of yield.
- **Opportunity Cost (OC)**: The income sacrificed by choosing organic (e.g., land rented out, capital invested elsewhere).

Gross Margin (GM) = Production Value – Variable costs

Profit = Gross Margin – Fixed Cost + Subsidies

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Table 5.1. provides an illusrative overview of typical changes in variable and fixed costs during the conversion to organic farming, based on commonly observed practices in temperate European farming systems. The figures and ranges presented are indicative and intended to highlight cost dynamics rather than to represent average or guaranteed outcomes. Actual cost developments depend on crop type, scale, mechanisation level, labour availability, and national regulatory and market conditions.

Category	Detailed content	What's happening during conversion
Seeds and seedlings	Conventional seed and farmer's propagation; legumes for N fixation	In the first year, costs increase (purchase of tested varieties), in the 2nd-3rd year, they decrease due to on-farm reproduction.
Fertiliser	Synthetic N-P-K vs. compost, digestate, manure	Savings of up to 55 EUR/ha due to the elimination of mineral fertilisers but partially compensated by higher diesel consumption during incorporation.
Plant protection	Herbicides, fungicides, insecticides	Chemistry is disappearing, but mechanical weeding increases fuel costs and depreciation of the weeder (≈ 17 EUR/ha/year).
Work	Seasonal temporary workers, their own family	Manual weeding and selective harvesting increase the labour requirement by 20–30 hours per hectare for vegetables and 5–8 hours per hectare for cereals.
Certification and consulting	registration fee, inspection audit, and continuous sampling	One-off ±1,500 EUR per entry, as well as 0.3% of turnover per year – must be included in the FC.

Table 5.1. *Example of variable and fixed costs (amounts refer to the Czech Republic)*

Common mistake: Farms often underestimate hidden fixed costs such as management time, administration, and machine servicing, producing overly optimistic gross margins.

Revenue side during conversion

The conversion phase presents unique financial challenges and opportunities, as returns and market dynamics differ from both conventional and fully certified organic farming. The following points summarise key revenue streams to consider:

- Production value: In conversion, farmers expect lower returns, but still at the regular (conventional) market price.
- Subsidies (agro-environmental & climate measures, e.g. "AEKO" in Czech Republic)

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- **Premium prices after certification**: For cereals, price premiums of approximately 25–40% compared with conventional prices have been reported in the Czech Republic and neighbouring Central European markets in recent years, based on market data and stakeholder interviews. However, actual premiums vary substantially by region, year, cereal type, contract conditions, and market access, and cannot be assumed uniformly across farms or marketing channels.

Revenue side – not just product sales

I. Harvest sales. In conversion, farmers sell at the prices of a conventional crop, but often to other customers (e.g. feed companies take "conversion" wheat with a deduction of ~3 EUR/t).

II. By-products, such as straw, whey, or manure, have a higher value in organic systems because they replace purchased inputs. In terms of cost and revenue, it is therefore advisable to value them with an internal transfer price (e.g., 30 EUR/t of straw).

III. AEKO: Under the Czech measure Cultivation of Other Crops, a payment of 246 EUR/ha is available both during and after conversion. In the modelled scenario, this corresponds to 24,600 EUR per year, which partially offsets the income reduction observed in the first year of conversion, although actual financial outcomes depend on yield development, market conditions, and farm-specific cost structures.

IV. Future price premium. Globally, on average the price premium varies between 25–40% for organic cereals compared to conventional prices. In Table 5.2. we used a +25% increase for wheat.

Revenue Example

Conversion wheat = conventional price − ~ 3 EUR/t deduction
Certified organic wheat = +25% premium used as baseline in Table 5.2.

Cash-flow and risk factors

A profitable farm may also lack cash in the spring. Recommended tools:

- Revolving credit up to ~20% VC (short maturity).
- Forward contracts to sell the harvest for price hedging.
- Financial reserve of at least 20% of annual VC in liquid assets.
- Yield insurance against extreme weather.

Table 5.2. presents illustrative risk scenarios based on a representative farm operating under Czech agricultural, market, and financial conditions. The assumptions

reflect typical yield variability, price levels, subsidy timing, and financing instruments observed in the Czech Republic. The scenarios are intended to demonstrate the types of risks and cash-management responses farmers may face, rather than to provide precise forecasts or outcomes applicable to all farms or regions.

Factor	Negative scenario	Impact	Possible reinsurance
Weather (drought, hail)	–25% return	−10,700 EUR GM	Income insurance (severance pay ~30 EUR/ha)
Price fall of conventional wheat (-15%)	Price 141 EUR/t	−12,000 EUR of sales	Forward contract/crop diversification
Delay in subsidy payment	6 months postponed	Liquidity gap of 24,600 EUR	Revolving loan (O/N PRIBOR + 1.5 pp)

Table 5.2. *Risk scenarios and cash management*

Sensitivity: Simulations show that a 1% premium price increase after certification increases net profit by approximately 730 EUR, while the same relative increase in VC decreases it by approximately 480 EUR. The farm should therefore place great emphasis on marketing and negotiated contracts, because the market variable has more leverage than the input costs.

Cost & revenue planning checklist

- Create separate cost centres per crop
- Include all fixed costs, especially certification & admin
- Build a liquidity reserve (20% of VC)
- Model sensitivity: yield ± 20%, price ± 15%, VC ± 10%
- Pre-negotiate “in-conversion” contracts with buyers
- Plan machinery costs realistically (depreciation + repairs)

5.2 How to remain economically sustainable during conversion

The conversion period resembles the pilot phase of a start-up: lower yields, higher labour, tighter cash flow. Sustainability comes from spreading risk, diversifying revenue, and stabilising liquidity.

Diversification as the main “shock absorber” of risks

Concentrating on a single commodity is like riding a unicycle: all it takes is a price drop

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or weather, and income disappears. Diversification of crop and livestock production reduces the "monoculture hazard" and improves the utilisation of manure or catch crops. Combination of grain, legumes and pasture cattle in addition:

- spreads market risk (each commodity has a different price cycle),
- stabilises soil fertility and thus suppresses the decline in yields,
- It allows for a slower shift away from synthetic fertilisers without a sudden drop in nitrogen.

At the product level, you can go even further: milk makes more products like cheese, or kefir; One slaughter produces not only meat, but also dried snacks or broth concentrate. This vertical differentiation creates several price levels and appeals to a broader range of customers.

Non-production activities – the second leg of the budget

Part of the risk can be transferred outside the commodity market using services and energy. The examples presented in Table 5.3. are illustrative and based on typical cost structures, income levels, and market conditions in the Czech Republic. They reflect prevailing prices, investment costs, and support conditions observed on Czech farms and are intended to demonstrate potential diversification pathways rather than to provide universally applicable benchmarks. Actual outcomes may vary depending on location, scale, access to markets, and farm-specific circumstances.

Activity	Annual income	Initial investment	Synergy
Agro-tourism – conversion of a barn to 6 beds	≈ 17,060 EUR	36,540 EUR	Direct sales from the farm, customer education
Educational workshops (10 × per year)	≈ 4,870 EUR	1,220 EUR	Building a "farm community"
Photovoltaic (solar) power plant 50 kWp	≈ 12 180 EUR savings/sale	60,900 EUR	Reduction of fixed energy costs

Table 5.3. *Examples of Farm Diversification Activities, Investments, and Synergies (Gross conversions according to the CNB exchange rate: 1 EUR = 24.63 CZK as of 9 July 2025.)*

These activities have a double effect: they smooth out seasonal cash fluctuations while strengthening the brand – a visitor who has slept on a farm or tasted homemade ice cream is likely to become a loyal subscriber to the CSA package (see below).

Marketing during conversion – transparency and community models

Products "in conversion" cannot be marked with the BIO logo, and yet they require more expensive procedures. The solution is proactive communication:

- Storytelling about the path to organic regular posts, photos of weeding instead of herbicide, and an explanation of the benefits for the landscape.
- Customer subscriptions (CSA boxes) – the consumer pays in advance, shares part of the risk, and the farm receives capital for seeds or certification; the loyalty of CSA members is many times higher than that of ordinary customers.
- Partner gastro-projects – a common menu with a local restaurant or bakery expands the audience without the marketing costs.

Digitally, a combination of Instagram (emotion + visuals), Facebook (community discussion) and an email newsletter for retention campaigns has proven to be effective. Consistency and authenticity are key: the customer will patiently accept even a lower visual standard if they see honest "making-of" footage from the farm, especially in conversion when there is no official logo.

In summary economic sustainability in conversion is not about one miracle too-it's a mosaic:

- Production diversification dampens weather and price shocks.
- Non-production activities bridge cash flow and build a brand.
- Transparent marketing explains to customers why to support the farm before the organic logo.
- Precise work with liquidity prevents payment distress in the critical spring period.

5.3 Marketing of agricultural products in conversion and after conversion

An organic product is marketed not only on the basis of its physical characteristics, but also through a broader set of process- and value-related attributes, such as landscape stewardship, reduced use of synthetic pesticides, links to land management, and animal welfare standards. These attributes are not immediately visible in the product itself and therefore need to be communicated clearly to consumers. Acceptance of higher prices depends on whether customers understand and trust these characteristics. In this context, the "rule of three" applies: trust → explanation → willingness to pay.

During the conversion period, this mechanism becomes more demanding, as farms incur the costs associated with organic production but are not yet permitted to mar-

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ket products under the official organic logo. In this phase, transparency becomes the main signalling tool: farmers must openly communicate how production practices differ and why, in order to build consumer trust despite the absence of formal certification.

5.3.1 Brand building: story, region, intangible values

a) Storytelling in practice

Short-form video (e.g., Reels) is now the dominant touchpoint for Gen Z and emerging generation alpha audiences. Effective examples:

- 15–30 sec reel: "0 mg herbicides, 100% effort"
- Behind-the-scenes of hoeing, sowing, harvesting
- Humorous contrasts ("What your cereal thinks farmers do vs. what they actually do")

Reels generate ~38% more engagement than static posts on agricultural accounts (2025 data).

Long-form formats (blogs, YouTube) work for deeper explanation – soil health, crop rotation, or certification processes.

b) Regional anchoring

Consumers increasingly look for provenance. Tools include:

- QR code linking to a 30-sec field video
- Map of "Field → Table" on packaging
- Open days with farm walks and sensory experiences

Farms that host family events see 17% higher repeat purchase, based on NPS tracking (2023–2024).

c) Intangible values

Organic farms also sell biodiversity services:

- "Green dividend" campaigns: For every 5 EUR spent, we plant 1 m^2 of meadow.
- Pollinator reports, bird-nesting updates, before/after landscape photos
- Intangible contributions create emotional loyalty and differentiate organic from "clean-label" conventional products.

5.3.2 Extended Marketing Mix (7P)

The 7P Marketing Mix is a simple tool to help farmers think about everything that affects how their products are sold. It is especially useful during conversion to organic farming, where trust and communication are key.

1. Product – What you sell

Your "product" includes everything you offer to customers:

- farm produce (milk, meat, grains, fruit, vegetables, eggs)
- processed goods (cheese, honey, bread, jams, dried foods)
- services (farm tours, workshops, CSA memberships)

Why it matters for farmers: Customers choose products that meet their needs for taste, freshness, safety, and values.

- Organic customers especially value transparency.

2. Price – What you charge

Price is not just a number. It depends on:

- your production costs
- organic certification expenses
- time and labour
- market prices around you
- what value customers see in your product

Why it matters for farmers: Organic farming often has higher costs. Customers will pay more – **if they understand the value**.

Good pricing helps you:

- stay profitable
- plan future production
- communicate fairly with customers

A well-explained price builds trust.

3. Place – Where customers buy

This is about making your products easy to find. It includes:

- farm shops
- local markets

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- CSA or box schemes
- small local stores
- online shops or social media sales
- direct delivery routes

Why it matters for farmers: Choosing the right place helps you reach the customers who value your products most – especially those looking for organic, local, or seasonal foods. Direct selling also increases your profit and builds stronger relationships.

4. Promotion – How people hear about you

Promotion means sharing information about your farm and products.For organic farms, promotion is also storytelling – explaining how you care for the land and animals. This includes:

- social media posts
- flyers and posters
- word of mouth
- farm events and open days
- packaging and labels
- local newspapers or community groups

Why it matters for farmers: Good promotion helps customers:

- know what you offer
- understand why your products are special
- trust your farm and practices

5. People – Who customers meet

"People" includes everyone representing your farm:

- family members
- workers
- market sellers
- delivery drivers

Why it matters for farmers: Friendly, honest, and knowledgeable people make a huge difference. Customers want:

- clear answers
- helpful service
- respect and good communication

This is especially important for organic farmers, because customers often ask questions about methods and certification.

6. Process – How customers buy from you

The "process" is the customer journey, which may include:

- ordering (online, phone, message, in person)
- collecting or receiving delivery
- payment and invoices
- after-sales communication

Why it matters for farmers: A smooth and simple process:

- saves time
- reduces mistakes
- makes customers come back
- helps you manage workload efficiently

For organic farms, having a clear process also increases trust and reliability.

7. Physical Evidence – What proves your quality

These are the visible signs that show customers your farm is trustworthy:

- clean farm shop or stall
- tidy product displays
- attractive packaging
- clear labels and certificates
- a simple, good-looking website or social media page
- professional signs and printed materials

Why it matters for farmers: Customers often judge quality by what they see. Good physical evidence:

- builds confidence
- confirms your organic standards
- makes your products stand out in the market

Small details can strongly influence buying decisions.

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5.3.3 Digital Ecosystem 2025: trends for organic farms

Even very small organic farms can now reach local customers using modern digital tools – often for free. The following trends show how farms can strengthen their direct sales, build trust, and stay visible in an increasingly online marketplace.

1. Personalisation AI (Recommendation Engine)

- A built-in tool in many online shop platforms that automatically suggests products based on what a customer viewed or bought.
- Works like a digital shop assistant: "Bought tomatoes? You might also like fresh basil or our weekly veggie box."
- Helps increase repeat purchases and encourages customers to add one more item to their order.

2. Micro-Influencers (Local Social Media Partners)

- Regular people on Instagram, Facebook or TikTok with fewer than 15,000 followers, often from your region.
- Their followers trust them because they communicate naturally and show their real life – not polished advertisements.
- Farms often collaborate through barter (a weekly produce box), making this a low-cost way to reach new local customers.

3. AR Filters (Augmented Reality Effects)

- Simple visual effects for Instagram/TikTok that place users into a farm-themed scene (meadow, orchard, barn, animals) or add playful elements.
- Customers often share these photos during farm visits or product pickups, giving your farm quick and organic visibility.
- A well-made filter can spread rapidly – thousands of uses in the first days are common if it's fun and local.

5.3.4 Practical marketing checklists

Checklist: Marketing during conversion

- Communicate openly and frequently
- Use Reels weekly (15–30 sec)
- Publish monthly long-form explanation (blog/YouTube)

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- Host at least two open-farm events per year
- Build a simple landing page explaining "Why we are converting"
- Pre-sell CSA shares or subscription boxes

Checklist: after certification

- Update packaging with organic label & QR code
- Re-negotiate contracts reflecting organic premium
- Introduce micro-influencer partnerships
- Launch AR filter or seasonal campaign
- Measure engagement: CTR, retention, CSA renewals

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5.4 Best practices: examples of successful marketing strategies

5.4.1 Diverse fruit and vegetable production: St. Procopius Orchards (Czech Republic)

Location & short profile

Sady sv. Prokop is located in South Bohemia, in the village of Temelín, near Týn nad Vltavou, and approximately 30 km north of the regional city of České Budějovice – sady sv. Prokop is located at an altitude of 440 m above sea level, in a slightly sloping terrain. The farm has been in operation for more than 13 years.

The farm's area is 58 hectares, with a primary focus on fruit and vegetable production, including its processing and logistics. The orchards make up about a third of the farm's area, mainly apples are grown here, followed by pears, cherries and plums. In the fields, adjacent to the strawberries, which belong to the St. Procopius Orchards, are some of the important crops, including zucchini, pumpkin, tomatoes, peppers, peas, cucumbers, onions, and garlic.

Sady sv. Prokop is both an ecological and a social farm. In addition to regular working hours, they also offer part-time and adapted work to individuals with various types of disadvantages, while collaborating closely with other farmers and social enterprises. The number of employees also varies depending on the season and ranges in the tens.

Description of marketing activities

The fundamental economic pillar of the St. Vitus Orchards. Prokopa is the sale of fruit and vegetables, both fresh and processed. The added values, which are also strongly communicated in marketing, include the origin in ecological agriculture and the support of disadvantaged people within social agriculture. Even more so, most customers appreciate the emphasis on local origin, short supply chains and production quality.

Sady sv. Prokop founded and operates the Odyte cooperative Zelený košík, through which the production of other cooperating farms, including conventional farms, is also distributed. This enables the cooperative to offer a broader range of products, making them a more attractive partner for a variety of customers, including individuals, gastronomic establishments, canteens, and other organisations.

The Zelený košík sales cooperative is not the only channel for product distribution. The farm also operates an e-shop and a shop located directly in the yard, offering seasonally self-harvested produce (e.g., strawberries) and regularly participating in farmers' markets.

Cooperation with other organisations, including non-agricultural ones, is also a crucial pillar. The farm is part of the Living Lab and actively collaborates with research and educational institutions (e.g., involvement in Horizon projects, as well as several national projects) – sady sv. Prokop, in cooperation with the Ministry of Agriculture, also acted as a so-called demonstration farm (an example of good practice presenting innovations to other farmers and the public).

The emphasis on innovation and the involvement of numerous people also allow for high diversification of production. Sady sv. Prokop have their own processing and logistics capacities, including warehouses that allow for the storage of several types of vegetables and fruits under different conditions, with the effective separation of conventional and organic production.

The farm produces more than 120 types of products, and sells over 10,000 of these products in a single calendar year. These include a classic range of products made from organic fruit. In other products, they combine their organic fruit with fruit from other farms that ripen during the season. The vegetable line has been an enrichment in recent years. Fruit is used to make ciders, jams, snacks, syrups, juices, dried fruit, and compotes, as well as plum jam. From organic vegetables, sauces, pickles, chutneys, sauerkraut, pickled vegetables, mustard and snacks.

Another activity that yields a specific product is the processing of potatoes, which, in addition to washing and peeling, involves cutting them into quarters and vacuum-packing without the use of preservatives. It is highly valued by a number of gastronomic establishments, including a number of schools and kindergartens.





Figure 5.1., 5.2. *Fruit and vegetable produce St. Procopius (Source: https://www.sady-prokopa.cz/)*

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Figure 5.3. *Fruit and vegetable production at St. Procopius (Source: https://www.sady-prokopa.cz/)*

Advantages & risks

Sady sv. Prokopa bases its sustainability on high diversification of production and quality communication with customers. They do not sell their products through chains but supply them directly to end customers. Climatic fluctuations, which have significantly damaged crops in recent years, are proving to be a risk for the farm. A related risk is drought, which complicates the cultivation of some types of fruit and vegetables. In collaboration with research institutions, the farm is exploring ways to address these challenges, whether through technological solutions (such as irrigation systems) or breeding and agronomic approaches (including the selection of varieties and crops, as well as modifications to half-cultivation methods).

All facts and information in this text were obtained from an interview/conversation with the farm personnel and additional information from the official website.

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5.4.2 Running a self-sufficient family farm successful: Odorica Eco-farm (Slovakia)

Location & short profile

The farm of Andrej Homola, located in Odorica near Levoča, Slovakia, operates as a self-employed family-run farm with a total area of 5 hectares, including 1 ha of arable land and 4 ha of permanent grassland. The farm focuses on medicinal plants, vegetables, and fruit varieties, along with small-scale cattle breeding (3 livestock units) without commercial milk production. Crop processing is carried out in cooperation with AFRA BIO s.r.o. in Levoča. The farm's workforce consists of family members – Andrej, Miloš, Zuzana Homola, and Miroslav Spodník. Situated at 650 metres above sea level, the land features cambisols and pseudogleyic soils with sandy-loam to loamy textures and an average annual rainfall of 650 mm. Established in 1990 by Andrej Franko, the farm began its organic conversion in 1996 with 1 hectare of medicinal plants and has since expanded all its land under the organic farming certification system.

A brief look back in history: the settlement of Odorica was formerly the manor of Count Čáky, covering 100 hectares (yard, arable land, meadows, pastures, and forests). It was settled by seven families during the agrarian reform after World War I. Even then, they were self-sufficient – purchasing only salt. In the 1950s, the Communists expropriated their land, leaving each family just half a hectare of so-called "záhumienok" (a private plot). After 1989, the land was returned, but due to the Hungarian inheritance law, the original 14 owners' land was divided among about 80 owners, and currently, they number around 120.

> *"We are the only descendants of one of those families who returned. We produce healthy food for all our families ourselves, and if we wanted, salt would be the only product we would still need to buy."*

Description of marketing activities

The farm's founder, Mr Andrej Franko, spent his life collecting, cultivating, and processing medicinal plants, especially plant adaptogens. After 1989, on the regained land, he started growing medicinal plants and developed his own recipes for making natural tinctures, which are still strictly followed today. In 1993, together with his daughter Zuzana, he founded the company AFRA. Since 1996, the land has been registered within the organic farming system, making the farm one of the oldest eco-farms in Slovakia. The farm cultivates many types of medicinal plants (over 20 species, including *Echinacea purpurea, Aronia melanocarpa, Bidens spp., Borago spp., Tropaeolum majus, Chelidonium majus, Leuzea carthamoides, Rhodiola rosea, Schisandra chinensis, Eleutherococcus senticosus,* etc.). Based on the original recipes, herbal tinctures and

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teas are produced – all BIO quality – in an officially approved manufacturing facility in Levoča with an adjoining shop. Thanks to the dedicated efforts of daughter Zuzana, the family's vision of a "direct path from nature to health" was fulfilled. Since 2006, products have been distributed to customers all over Slovakia and abroad, mainly to small shops, tea houses, and pharmacies (approximately 30 in Slovakia).

The farm also sells directly from the yard, mainly live animals and other products. Both plant and animal products are also for the personal consumption of the four families working on the farm. In recent years, the farm has expanded its activities to agro-tourism, education, and training. Visitors can take guided tours, sample traditional products, make cheese, butter, or string cheese ("parenice"), ride horses, learn about domestic and farm animal care, and relax in nature.

Odorica Farm is registered in the WWOOF system. Volunteers can come year-round to help with daily work in exchange for food and accommodation. People come not only from Slovakia but also from abroad. Since 2005, the farm has hosted an ECO CAMP every summer, aimed at adults, with children also welcome. Accommodation is either in personal tents or in the barn on hay. Facilities include an open-air shower under the stars, toilet, water, electricity, and a kitchen.



Figure 5.4. *Area of Odorica Eco-farm. Source: the Homola Family*

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Figure 5.5. *4th generation of farmers (from the left): Miloš, Andrej Homola and Miroslav Spodník with 5th generation. Source: the Homola Family*

Advantages & risks

In 2024, the next generational shift occurred, with the craft being taken over by the fourth generation, son Andrej Homola. The methods of growing and especially processing medicinal plants remain unchanged, with new sales channels (such as the internet), new forms of communication, collaboration, and experience-based activities for the public, particularly for children, being added.

> *"Our efforts are often hindered by complicated legislation and insufficient development of field advisory services. Our support has always been and still is the only professional association for organic farmers in Slovakia – the Ekotrend Union. Despite the constant need to overcome new challenges, we believe that future generations will continue this way of life, for 'the freest person is the one who is bound to the land and nature.'"*

All facts and information included in the text were provided by Zuzana Homolová.

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5.4.3 Community supported agriculture: Táncoskert Farm (Hungary)

Location & short profile

Táncoskert is a regenerative farm with a mixed profile (crop production + animal husbandry) located in Hortobágy at the border of Polgár. The size of the app. 400 ha (own and rented land) including 30 ha homesteads, 10 ha marsh, 20 ha pastures (2 ha ploughed). They decided to phase out crops that they think don't fit the climate well, like corn, and instead started growing peas, vetch, and similar ones. The goal is that they can be grazed, or their straw can be used as feed if needed. Their seeds are also high in protein, which helps reduce the dependence on outside sources.

The farmland is primarily certified organic, only a small area is currently in transition. The arable land is cultivated using no-till or minimum-till methods, all in compliance with organic regulations. At the beginning, the animals were also certified. They have Hungarian Grey cattle, Mangalica pigs (both Hungarian indigenous breeds) and sheep. Over the years they have had pheasants, partridges, ducks, geese, turkeys, hens, chickens. The chickens are not certified organic, but they are raised to organic standards except for those in the mobile chicken coop. The farm has an internship programme, offers mentoring, and also operates as a demonstration farm of the Hungarian Savory Hub. There is a family division of work on the farm.

Description of marketing activities

The Táncoskert farm offers a wide selection of Mangalica and beef products. They produce sous-vide–ready items for both their CSA (Community Supported Agriculture) members and the VillámPiac (FlashMarket) webshop, which originated as RECO (Regional Cooperation for Short Supply Chains). There is a membership programme for processed products such as sausages, Texas chili, and cevap. Their offerings include sous-vide pork loin cold cuts and smoked pork loin slices made without nitrite curing salt. In addition, they provide cuts like hind shank, paprika-seasoned boiled bacon, shoulder, soup bones, and tenderloin. All products come directly from the farm, ensuring authenticity and high quality.

Since the beginning, the farm has been engaged in direct sales. The direct distribution channels are as follows:

- VillámPiac (FlashMarket) Webshop (https://www.villampiac.hu/): the shortest possible supply chain where the producer meets the consumer without intermediaries. This site allows consumers to submit pre-orders directly to producers. Currently, they offer 84 products. Every week, all buyers and producers meet in a distribution point (car park), where only the exchange of goods takes place.

- CSA (community supported agriculture): At the time of its establishment in 2013, Táncoskert was the first animal husbandry farm applying the community-supported agriculture model in Hungary.

Táncoskert farm sells its products through community-supported agriculture. After the development of a special online system by the owner's brother, members can choose from a menu that allows them to tailor the amount of meat to their own needs and consumption habits even more closely. They regularly deliver to 150–160 families, who pick up their products at collection points in Budapest.

The chicken leasing system has remained unchanged since the beginning: members can lease laying hens for one year and receive the eggs those hens lay during that period. The farmer and his team track the yield, and members receive the average egg yield for the given week. It is also possible to lease multiple hens, which means the portion doubles or triples accordingly. Based on experience, leasing one hen corresponds to roughly 150 eggs per year.

Since their focus is primarily on meat products, the opportunities for packaging-free sales are limited. However, they make an effort to use recycled materials wherever possible (e.g., storing fat in reused jam jars, reusing egg cartons). Community members also receive animals' edible offal, ensuring minimal waste. Unfortunately, several animal by-products such as hair, horns, and bones currently lack a market due to the absence of local processing industries like tanneries or furriers. Nevertheless, the farm preserves or donates whatever is possible. They have also begun collaborating with a partner company to repurpose the coarse wool of the Racka sheep (Hungarian indigenous breed) into waterproof but warm cushions and dog beds, reusing old advertising banners. Driven by ethical values, the farm owner is committed to making full use of each animal after slaughter.

Advantages & risks

Táncoskert is a holistically managed, regenerative, permaculture-based farm, primarily using grazing to regenerate the land and restore its natural balance. The owner of Táncoskert farm cites community and human connections as main advantages of the CSA. He likes to communicate with the members. Even if he does not meet some families in person, he talks to them on the phone. During these interactions with the members, he can get useful feedback.

Since the biggest challenge at the farm is the labour shortage, the farmer sees the need for task allocation within the company and collaboration with new colleagues responsible for specific areas. By reducing the workload in that way, he and his wife would be able to share their expertise with the new team members in a greater capacity. They are currently building their own abattoir to complement their existing meat

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Figure 5.6., 5.7. *Táncoskert farm (source: https://tancoskert.hu/)*

processing plant. By organizing a cooperative around it, they can also help others with their market access challenges. It should be mentioned that they don't really sell to resellers and still can manage to deliver everything personally.

In the owner's opinion, small-scale farming (like theirs) is more stable and human-scale solutions are always more sustainable in the long term.

In summary, the community membership and upfront payment helps the farm cover costs of animal feed, veterinary care, and processing. The shared risks (e.g., illness, drought, or lower yields) and the rewards (e.g., plentiful, high-quality meat) create a stable and supportive relationship between farmers and consumers. Animals are typically raised on pasture using ethical and sustainable practices. The nose-to-tail philosophy (the CSA farms encourage full use of animals) reduces waste and honours the life of the animal. Also, the advantage of CSA farms is community involvement and transparency.

In CSA meat production, risks include animal health challenges such as disease outbreaks and parasites, which can significantly impact livestock well-being and productivity. Managing humane and sustainable animal welfare practices can be complex and costly. Financial risks arise from higher costs, combined with reliance on consistent member demand for meat shares. Market risks include the competition with traditional meat producers and changing consumer preferences towards alternative proteins or plant-based diets. Additionally, operational risks include labour shortages and logistical challenges (e.g., in processing and delivering quality meat products directly to members.

All facts and information included in the text were provided by Z. Lengyel.

References

https://tancoskert.hu/

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6. Practical tools and resources

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6. Practical tools and resources

6.1 EU legislation

Regulation (EU) 2018/848 of the European Parliament and of the Council of 30 May 2018. On organic production and labelling of organic products and repealing Council Regulation (EC) No 834/2007, as amended.

→ Link: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32018R0848

Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017. On official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health, and plant protection products (Official Controls Regulation), as amended.

→ Link: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32017R0625

Delegated and implementing regulations of the European Commission related to the Regulation on organic production and Regulation (EU) 2017/625 of the European Parliament and of the Council.

→ Link: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32017R0625

6.2 National legislation

Slovakia

Act No. 282/2020 Coll. on Organic Production, as amended → Link: https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2020/282/, the obligations of an organic farm operator (EPV) are outlined in §10, with reference to the above-mentioned EU regulations.

Government Regulation of the Slovak Republic No. 3/2023 Coll., establishing the rules for granting support for non-project measures under the CAP Strategic Plan of the Slovak Republic, as amended, §§34, 35, 36 – support for organic farming. It includes individual operations of the measure, minimum area requirements, conditions of the measure, conditions for conversion, and maintenance of organic farming.

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Czech Republic

Act No. 242/2000 Coll., on organic farming, regulates, in accordance with European rules, the conditions of management, certification and labelling of organic products and supervision of their compliance in the Czech Republic.

https://mze.gov.cz/public/portal/mze/zemedelstvi/ekologicke-zemedelstvi

The Act only applies to those areas that are not regulated by European legislation for organic farming, and the European Union leaves them to the national regulation of individual countries. The Act, nor European legislation, concern state support for organic farming or the provision of subsidies for organic farming. This issue is the subject of the relevant government regulation.

Decree No. 16/2006 Coll., implementing some provisions of the Act on Organic Agriculture and its innovations

Government Regulation No. 44/2024 Coll., amending Government Regulation No. 81/2023 Coll., on determining the conditions for implementing organic farming measures, and some other government regulations.

For organic food certified in the Czech Republic, the national trademark – the graphic symbol "biozebra" is also mandatory.

Hungary

Decree No. 34/2013 (May 14) of the Ministry of Rural Development on the certification, production, marketing, labelling, and control procedures of agricultural products and foodstuffs in accordance with organic farming requirements.

→ Link: https://net.jogtar.hu/jogszabaly?docid=a1300034.vm

Germany

In Germany, the Organic Farming Act (ÖLG) and the ÖLG Implementation Ordinance regulate the organic control system and responsibilities. The Organic Farming Act (ÖLG) is a law enacted by the Federal Republic of Germany to ensure the implementation of EU legislation on organic farming. In particular, the regulation serves to introduce a nationwide procedure for authorising inspection bodies to verify organic quality. At the same time, it creates a system of penalties and administrative offences for violations of EU legislation on organic farming.

→ Links: https://www.gesetze-im-internet.de/_lg_2009/ and https://www.gesetze-im-internet.de/_lg-dv/

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6.3 Administrative requirements for farmers

Slovakia

- Registration, farmers register with the Central Control and Testing Institute in Agriculture (ÚKSÚP, www.uksup.sk/sekcia-rastlinnej-vyroby-a-skusobnictva)
- Official Control, conclude the contract with an authorised inspection body, e.g. Naturalis SK, s.r.o. (SK-BIO-002), http://www.naturalis.sk/; or Biokont C Z, s.r.o. (SK-BIO-003) http://www.biokont.sk/
- Application for financial support under the Simple Payment Application (SPA); apply for inclusion under Agro-environmental-climate-measure (AECM), commitment is multiannual, applied only once; apply for support under AECM, annually.
- Registration of animals, register your organic farm animals at the Central Register of Farm Animals;
- https://svps.sk/zvierata/ako-zalozit-a-zaregistrovat-chov-hospodarskych-zvierat/

Czech Republic

- Registration with the Ministry of Agriculture
- Conclusion of a contract with one of the accredited inspection organisations (KEZ o.p.s. (CZ-BIO-001) www.kez.cz, ABCERT AG (CZ-BIO-002) www.abcert.cz, BIOKONT CZ, s.r.o. (CZ-BIO-003) www.biokont.cz, Bureau Veritas Czech Republic, spol. s.r.o. (CZ-BIO-004) http://www.ekozemedelstvi.cz/
- Entry inspection: The inspection organisation will carry out an entry inspection and, based on its results, issue a registration certificate, which it will send to the Ministry of Agriculture.
- Comply with strict rules for the transitional period,
- Proceed in accordance with European and national legislation (in particular Council Regulation (EU) 2021/2115 and Government Regulation No. 81/2023 Coll.)
- Submit annual production reports.
- Report changes (area, animal conditions…)

Hungary

- Registration with the National Food Chain Safety Office (NÉBIH, Nemzeti Élelmiszerlánc-biztonsági Hivatal): https://portal.nebih.gov.hu/
- Contract with Certification Body, accredited by The National Accreditation Authority (NAH, Nemzeti Akkreditáló Hatóság) (2 in Hungary: HU-ÖKO-01 Biokontroll

Hungária Nonprofit Kft https://www.biokontroll.hu/ and ÖKO-02 Bio Garancia Magyarország Kft https://www.bio-garancia.hu/)

- In the case of violations of organic regulations, the territorially competent county government office takes action in accordance with the Unified National Sanctions Catalogue (in force since March 31, 2017).

Germany

In Germany, the competent authorities of the individual federal states are responsible for carrying out organic certification and monitoring compliance with the EU Organic Regulation. In view of the large number of organic farms in Germany, the authorities have outsourced the task of certification to recognised and monitored organic inspection bodies.

Authorities of the federal states of Germany:
https://www.oekolandbau.de/bio-zertifizierung/adressen/zustaendige-behoerden-oekoproduktion/

Eco-control bodies authorised in Germany:
https://www.oekolandbau.de/bio-zertifizierung/adressen/oeko-kontrollstellen/

6.4 Advisory services and farmers' organisations

Slovakia

The Agricultural Advisory System is established under IZPI Nitra, which includes individual advisors and information at www.agroporadenstvo.sk.

Only one farmer's organisation is established, the Union of Organic Farming (Zväz ekologického poľnohospodárstva), with advisors in the organic sector. More information at www.ecotrend.sk.

Czech Republic

The Czech Technology Platform for Organic Agriculture (ČTPEZ) is an association of major actors in the fields of science, research and education, agricultural and food production and trade, and sectoral non-governmental organisations focusing on organic agriculture and organic food production https://www.ctpez.cz/o-nas/. Consulting in organic agriculture has long been provided by the PRO BIO Consulting Association www.eposcr.eu, as well as 11 regional PRO-BIO centres of the Union of Organic

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Farmers, the main association of organic farmers in the Czech Republic www.pro-bio.cz, the consulting organisation Czech Organics www.czechorganics.com, or individual certified consultants. The Ministry of Agriculture of the Czech Republic has established a register of consultants, and its management is entrusted to the Institute of Agricultural Economics and Information (ÚZEI) as the administrator of the register and the methodological and control body for consultancy. These services include preparation for certification, record keeping, preparation of applications for subsidies, economic and marketing consulting, and assistance with compliance with legislation and rules of organic production.

Hungary

The National Chamber of Agriculture (NAK) does not have a separate organic production department, but operates the National Advisory Center (OSzK), which plays a coordinating, registration, and supervisory role within the Hungarian Agricultural Advisory System (MSzR): Decree No. 16/2019 (April 29) of the Ministry of Agriculture; s.15/B of Act CXXVI of 2012 on the Hungarian Chamber of Agriculture, Food Economy, and Rural Development. The majority of registered advisors assist farmers mainly with administrative duties related to agricultural subsidies and funding opportunities. Only a very few of them provide professional technical advice related to production. https://www.nak.hu/

Hungarian Biokultúra Association (Magyar Biokultúra Szövetség) is a national umbrella organisation uniting civil groups in Hungary's organic farming sector, which represents the interests of domestic organic farmers in legislation at both national and international levels. https://biokultura.org/magyar-biokultura-szovetseg/

Germany

Organic farming associations and standards: The guidelines of the associations are sometimes stricter than the requirements of the EU Organic Regulation. An overview of the various farming organisations and their regulations can be found here: https://www.oekolandbau.de/bio-zertifizierung/richtlinien-der-oeko-anbauverbaende/

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6.5 EU subsidies for organic farming

First pillar of the CAP: selected direct payment rates for 2024

(European Agricultural and Guarantee Fund)

Slovakia

Measure	Rate	Remarks
Basic Income Support for Sustainability (BISS)	103.80 EUR/ha	
Complementary Redistributive Income Support (CRISS)	79 EUR/ha	up to and including 100.99 ha
	40 EUR/ha	from 101.00 ha to 150 ha
Complementary Income Support for Young Farmers (CIS-YF)	88.15 EUR/ha	up to 100 ha
Eco-scheme: Animal Welfare Support through Pasture-Based Livestock Farming		
– selected category of animals (sheep and goats)	119.24 EUR/LU	LU = Livestock Unit
– selected category of animals (dairy cows)	295.90 EUR/LU	
– selected category of animals (heifers)	65 EUR/LU	
Eco-scheme: Whole Farm Approach	60.36 EUR/ha	outside protected areas
	110.45 EUR/ha	within protected areas

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Czech Republic

Note: calculated at the euro exchange rate of September 2025 (1 EUR ≈ 25.1 CZK)

Measure	Rate	Remarks
Basic Income Support for Sustainability (BISS)	72.43 EUR/ha	
Payment for small farmers	282.21 EUR/ha	For farms up to 10 ha, however, the payment is provided for a maximum of 4 ha of land. It replaces all other direct payments – you cannot apply for this payment and another direct payment at the same time.
Complementary Redistributive Income Support for Sustainability (DRP/CRISS)	143.41 EUR/ha	Payment for the first 150 ha
Complementary Income Support for Young Farmers (CIS-YF)	103.21 EUR/ha	
Basic farm-wide eco-payment	70.70 EUR/ha	Entitlement to payment for all hectares of the holding
Whole-farm premium ecopayment	722.44 EUR/ha	Increasing non-productive areas in the agricultural landscape and contributing to the protection of watercourses.
Coupled Income Support (CIS)		Extensions to the basic farm-wide eco-payment
Income Support linked to Sugar beet production	242.89 EUR/ha	
Income Support is linked to the production of protein crops	60.76 EUR/ha	
Income Support linked to Sugar beet production	242.89 EUR/ha	

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Hungary

Note: calculated at the euro exchange rate of October 2024 (1 EUR ≈ 400 HUF)

Measure	Rate	Remarks
Basic Income Support for Sustainability (BISS)	95.53 EUR/ha	Maximum amount of advance payment, 70% of the total support (≈147 EUR/ha)
Complementary Redistributive Income Support (CRISS)	58.35 EUR/ha	1 – 10 ha
	29.18 EUR/ha	11 – 140 ha
Complementary Income Support for Young Farmers (CIS-YF)	54.63 EUR/ha	
Eco-scheme: Rotational/managed grazing	60.64 – 105.10 EUR/ha	
Grazing with indigenous breeds	60.64 – 105.10 EUR/ha	
Eco-scheme: Whole Farm Approach	60.64 EUR/ha	Dynamic, demand-dependent calculation of the payment, which depends on the annual eco-scheme budget for Hungary, compliance and total uptake. Most farmers receive ~80 EUR/ha.
	105.10 EUR/ha	

Germany

Measure	Rate	Remarks
Basic income support (EGS)	approx. 155 – 146 EUR/ha	
Redistributive income support (UES)	Level 1: 69 – 65 EUR/ha	for the first 40 ha
	Level 2: 41 – 39 EUR/ha	41 – 60 ha
Young farmer income support (JES)	Grant amount: – for max. 120 ha the planned unit amount per hectare is standardised for Germany in annual slices in the national strategy plan (134 EUR/ha)	Prerequisites: – Purchase of EGS

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Measure	Rate	Remarks
Coupled dairy cow premium (ZMK)	77 – 73 EUR / dairy cow	Prerequirements: – At least three dairy cows – No delivery of cow's milk or first calving until 15th May of the application year – Husbandry period 15th May to 15th August of the application year – Identification and registration of animals

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Second pillar of the CAP: organic farming subsidies for 2024

(European Agricultural Fund for Rural Development)

Slovakia

Measure	Rate	Remarks
Crops on arable land	170 EUR/ha	
Vegetables on arable land	795 EUR/ha	
Medicinal, spice, aromatic plants on arable land	417 EUR/ha	
Strawberries on arable land	1111 EUR/ha	
Potatoes on arable land	735 EUR/ha	
Orchards (productive) with higher tree density	904 EUR/ha	
Orchards (young) with higher tree density	554 EUR/ha	
Other types of orchards	814 EUR/ha	
Mixed landscape orchards	497 EUR/ha	
Young vineyards	468 EUR/ha	
Productive vineyards	762 EUR/ha	
Permanent grassland, basic contribution to specific objectives (0.3–0.5 LU/ha)	96 EUR/ha	
Permanent grassland, higher contribution to specific objectives (more than 0.5 LU/ha)	127 EUR/ha	

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Czech Republic

Measure	Rate Under conversion	Converted	Remarks
Permanent grassland	106 EUR/ha	100 EUR/ha	
Vegetables, medicinal, spice, aromatic plants on arable land	780 EUR/ha	760 EUR/ha	over 6 ha total area
Vegetables, medicinal, spice, aromatic plants on arable land	1294 EUR/ha	1251 EUR/ha	up to 6 ha total area
Strawberries on arable land	780 EUR/ha	760 EUR/ha	
Other crops on arable land	343 EUR/ha	246 EUR/ha	
Perennial forage crops	205 EUR/ha	180 EUR/ha	
Grasses for seed	205 EUR/ha	180 EUR/ha	
Grassland on arable land	205 EUR/ha	180 EUR/ha	
Permanent culture – Orchard	896 EUR/ha	850 EUR/ha	intensive
Orchard – other	536 EUR/ha	510 EUR/ha	
Vineyards	900 EUR/ha	847 EUR/ha	
Additional payment – vineyards	248 EUR/ha	248 EUR/ha	
Hop fields	900 EUR/ha	847 EUR/ha	

Hungary

Measure	Rate Under conversion	Converted	Remarks
Crops on arable land (others)	491 EUR/ha	382 EUR/ha	
Crops on arable land listed in 2. an annex (vegetables, medicinal and herbs)	1097 EUR/ha	664 EUR/ha	
Plantation – extensive orchard	1562 EUR/ha	879 EUR/ha	
Plantation – intensive orchard	1801 EUR/ha	1117 EUR/ha	
Plantation – vineyard	1132 EUR/ha	1097 EUR/ha	
Permanent grassland	225 EUR/ha	225 EUR/ha	

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Germany

Due to the federal system in Germany, the amount depends on the federal states; therefore, we decided to give the ranges in between the payments/ha that will be paid. An overview of the payments in each federal state you find here:

https://www.thuenen.de/de/themenfelder/oekologischer-landbau/aktuelle-trends-der-deutschen-oekobranche/praemienhoehe-fuer-die-oekologische-bewirtschaftung

Measure	Rate	Remarks
Crops on arable land	240 – 584 EUR/ha in conversion (Ø 394 EUR/ha) (first and second year of conversion) 202 – 314 EUR/ha (from the third year) (Ø 264 EUR/ha)	
Permanent grassland	210 – 609 EUR/ha in conversion (Ø 378 EUR/ha) (first and second year of conversion) 190 – 284 EUR/ha (from the third year) (Ø 240 EUR/ha)	
Vegetables	375 – 1500 EUR/ha in conversion (Ø 629 EUR/ha) (first and second year of conversion) 375 – 680 EUR/ha (from the third year) (Ø 487 EUR/ha)	
Permanent crops	850 – 1553 EUR/ha in conversion (Ø 1422 EUR/ha) (first and second year of conversion) 850 – 1060 EUR/ha (from the third year) (Ø 264 EUR/ha)	

In addition to the above-mentioned support, there is a "Transaction cost subsidy" (40 EUR per hectare) granted up to a maximum of 600 EUR per farm.

Farms with animal husbandry can require special support for replacement activities, e.g., for stable construction. This support depends on the individual costs. Therefore, an individual application is requested.

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7. Conclusion

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7. Conclusion

"Finding – that is the entirely new, new also in motion. All ways are open, and what is found is unfamiliar. It is a venture, a sacred adventure." — Pablo Picasso

The transition to organic farming is, due to its complexity, a challenge but also an opportunity to create an agriculture viable for future generations while securing the natural bases upon which farming relies. Conversion is never the appropriate option for all farms or at all times. It is rarely successful to enter into this process for purely economic reasons, since the conversion period involves time spent, as well as resilience and often substantial initial investment. Motivation – commonly shared by the farmer and his or her farm community at large – is a determining factor for long-term involvement. Of equal importance are meticulous planning and open communication throughout.

In addition to such internal drivers, pressures such as climate change highlight the resilience benefit of the organic farming systems. Their responsiveness and adaptability to environmental change add to their support for building crisis-proof agriculture. At the EU level, countless exemplary and pioneering examples already demonstrate how organic farming overlaps with wider sustainable practices. From community-supported to regenerative practices, from agroforestry to Keyline Design, from biochar usage to precision robots, such models reveal how the organic sector is constantly evolving to provide value to both society and the environment.

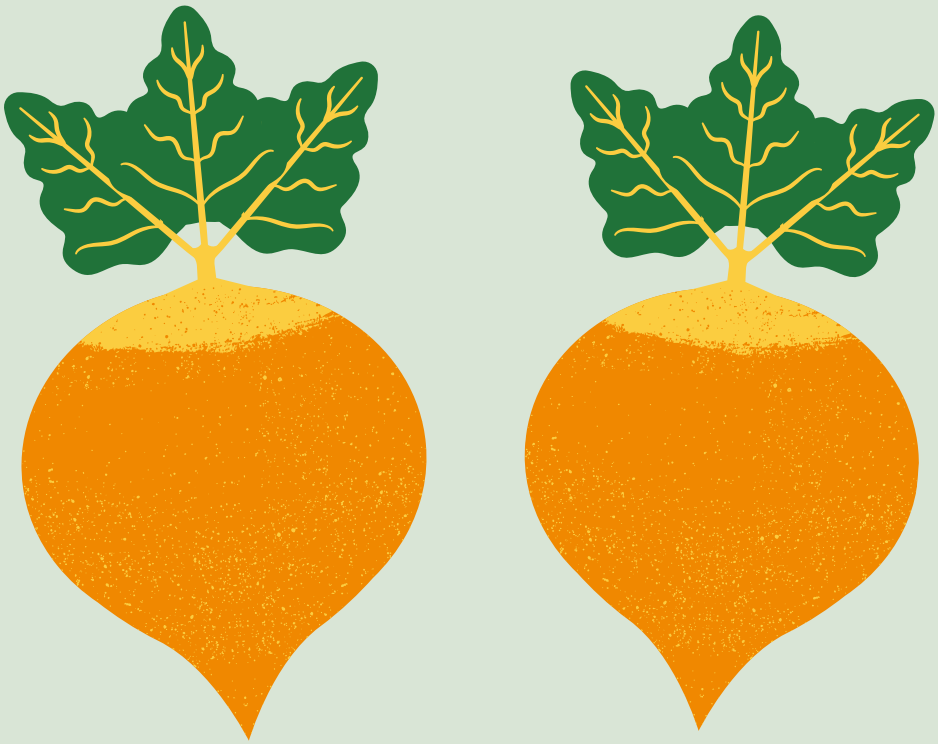
Farmers who consider conversion must also be cognizant of the three-year conversion period: a time in which organic rules prevail, but produce has only an "in conversion" status. Cautious economic planning, based on prudent cost estimating and revenue scenarios, is called for. Likewise, a successful result is also dependent upon offensive marketing. A combination of different channels, compelling storytelling, and clever utilisation of data to inform targeting and monitoring can be a formula for visibility and economic security pre- and post-conversion. With the right orchestration, marketing becomes a value multiplier: the customer understands the higher price as an investment in the landscape, the farm gets a stable cash flow, and the countryside – a viable economic model. Many successful EU organic farms distinguish themselves both for their farming practices and for having the ability to be innovative in marketing, as noted in Chapter 5.

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Achieving the ambitious objective of 25% organically utilised agricultural land by 2030 will require more than rules and subsidies (see Chapter 6). It will require efforts to reduce redundant bureaucracy, boost advisory services and extension work, and incorporate organic training into tertiary education and professional development. Most of all, it will require supporting farmers – both those already part of the organic movement and prospective entrants.

With the ETICOF Project and this Farmer's Guide to Conversion, we aim to provide practitioners with practical tools, knowledge, and inspiration. Consolidating knowledge, motivation, and networks should encourage new farming practices that support the social-ecological transition of Europe, as well as ensure a strong agricultural foundation for future generations.

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8. Appendix

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8. Appendix

8.1 Glossary

Adaptogens

Adaptogen is an alternative medicine term for biologically active plant substances that help the body adapt to increased physical and emotional stress situations.

Agroforestry

Agroforestry is the responsible combination of agriculture and trees/shrubs in a landscape, where trees are integrated into crops or livestock farming to achieve ecological and economic benefits such as improved soil, soil protection, biodiversity, nutrient cycling and sustainable production.

CAP

The Common Agricultural Policy (CAP) is a key policy of the European Union designed to support farmers, ensure food security, promote sustainable agriculture, and foster balanced rural development across Member States.

Conversion period

The conversion period is the time during which a farm or field transitions from conventional to organic production. This period allows soils and ecosystems to recover from previous non-organic inputs. During this phase, the practices already must comply with organic standards, but products can only be marketed as organic after the conversion period ends.

Cover crops

Cover crops are plants grown primarily to protect and improve the soil rather than for harvest. They help prevent erosion, enhance soil fertility, suppress weeds, and support biodiversity.

Climate adaptation

Climate adaptation refers to changes in farming practices that reduce vulnerability to the impacts of climate change, such as extreme weather, drought, or flooding.

In organic farming, this includes building healthy soils, increasing biodiversity, and improving water management.

Crop rotation

Crop rotation is an agricultural practice in which different species of crops are grown in a planned sequence on the same field over several growing seasons in order to increase soil fertility, reduce pests and diseases, and optimise overall yields.

Diversification

Diversification is the practice of growing a wider range of crops or integrating livestock into farming systems. It helps reduce economic and environmental risk while improving soil health and resilience.

EU Organic Regulation

The new EU Organic Regulation came into force on January 1, 2022. The EU Organic Regulation (EU) 2018/848 of May 30, 2018, is thus the new basic law for the organic sector in the European Union.

EU organic certification

EU organic certification is based on EU Regulation 2018/848, which requires products bearing the EU "organic" label to be produced and labelled according to strict criteria, inspected by a certification body recognised by the authorities, and the entire production and supply chain process to be monitored accordingly.

Organic farming association

Many organic farms in Germany are organized in cultivation and producer associations (e.g. Naturland, Bioland, Demeter etc.). Most associations belong to the German Organic Food Industry Association (BÖLW), which is the umbrella organization for the entire German organic sector.

O/N PRIBOR – Overnight Prague Interbank Offered Rate 1.5 pp = plus 1.5 percentage points

This refers to the interest rate at which Czech banks lend to each other overnight **1.5 pp** is the bank's margin added on top of the reference rate **LU – livestock unit**. One livestock unit (1 LU) corresponds to 500 kg of live animal weight.

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Partial vs. full conversion

Partial conversion occurs when only part of a farm is converted to organic production while the remainder continues under conventional management. This approach can help farmers manage risk during the transition but must follow strict separation rules.

Full conversion is when the entire farm transitions to organic production at the same time and follows organic standards across all land and enterprises. This approach simplifies management and certification by avoiding the need to separate organic and non-organic activities.

Rotational grazing

Rotational grazing is a livestock management system where animals are moved between grazing areas to allow pasture recovery. It improves pasture health, soil structure, and animal welfare while reducing overgrazing.

Subsidies for farmers

Under the CAP, subsidies are structured around **two pillars**. The **first pillar** provides **direct payments** to farmers and market support measures. Its main purpose is to stabilize farmers' income and ensure the economic viability of agricultural production. The **second pillar** focuses on **rural development**. It supports long-term measures such as environmental protection, climate action, innovation, and the development of rural areas. **Subsidies for organic farming are provided under the second pillar and are area-based linked to cultivated crops**.

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8.2 Pre-conversion suitability checklist

You can use this checklist as a self-assessment tool before beginning the transition to organic farming. It covers agronomic, environmental, economic, and managerial aspects. Each criterion should be evaluated as Yes / No / Needs Improvement, with space for notes or follow-up actions.

A. Farm site and agro-ecological conditions

Criterion	Yes / No / Needs improvement	Notes / Action needed
Is the soil generally healthy and fertile?		
Is the field drainage adequate (no waterlogging)?		
Are there existing issues with erosion or compaction?		
Does the local climate support organic crops/livestock?		
Is there access to sufficient clean water?		
Are natural habitats and biodiversity present or restorable?		

B. Current farming system and infrastructure

Criterion	Yes / No / Needs improvement	Notes / Action needed
Is there a history of low or moderate chemical input use?		
Can crop rotation and green manures be implemented?		
Is the machinery compatible with mechanical weeding, composting, etc.?		
Is manure or composting infrastructure available or feasible?		

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Criterion	Yes / No / Needs improvement	Notes / Action needed
For livestock: is livestock housing and pasture management suitable for organic welfare standards?		

C. Legal and regulatory readiness

Criterion	Yes / No / Needs improvement	Notes / Action needed
Have you researched national/EU organic certification rules?		
Do you understand the length and requirements of the conversion period?		
Are you prepared to keep detailed records and field logs?		

D. Economic and market feasibility

Criterion	Yes / No / Needs improvement	Notes / Action needed
Have you analysed the economic impact of reduced yields during conversion?		
Is there access to organic markets or buyers in your region?		
Do you have a financial buffer or access to support schemes?		
Have you developed a basic business/ conversion plan?		

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E. Social, personal, and knowledge factors

Criterion	Yes / No / Needs improvement	Notes / Action needed
Are you personally motivated to adopt organic principles?		
Are you open to changing farm routines and practices?		
Do you or your team have access to organic training/advisory services?		
Are family members or co-owners supportive of the transition?		

F. Overall strategic readiness

Criterion	Yes / No / Needs improvement	Notes / Action needed
Have you identified short-term and long-term goals for conversion?		
Have you identified potential risks and how to address them?		
Do you have a timeline or phased plan for the conversion process?		

Scoring Guidance

Mostly "Yes": The farm appears well-positioned to begin the transition. Proceed with detailed planning and certification steps.

Several "Needs improvement": Further preparation and capacity-building are needed. Consider targeted investments or advisory support before starting.

Mostly "No" answers: Major constraints exist; reconsider timing or explore partial/stepwise conversion.

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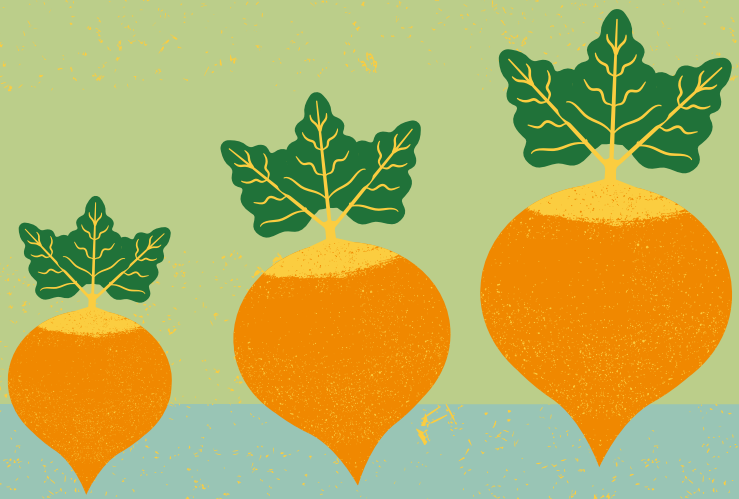
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