Collaborative project Grant agreement no: 101102353.



Deliverable number: D3.3 Governing Skills through Social Dialogue in European Agriculture: Evidence and Policy from SD4S

Submission date: 05/09/2025
Project month: 24

Start date of project: September 2023 Duration: 2 years

Partner in charge: Universidad Pontificia Comillas

Coordinator: GEOPA-COPA



Governing Skills through Social Dialogue in European Agriculture: Evidence and Policy from SD4S

Fernando Cárdenas-Domínguez.
Instituto Universitario de Estudios sobre Migraciones — Universidad Pontificia
Comillas

This deliverable consolidates evidence from two SD4S comparative surveys to explain how sectoral social dialogue can scale lifelong learning in European agriculture. Institutional architectures remain heterogeneous across Member States: ministries of labour and socioeconomic councils are frequent interlocutors, yet legal recognition, implementation, and enforceability of agreements are uneven; public support is fragmented and often reliant on EU and national funds, with a non-trivial share reporting no support. On the training side, provision is active but biased toward non-accredited, informal learning; formats are diverse, but portability suffers where recognition pathways are weak. Incentives rely more on formal recognition than on time- and cost-based supports, particularly for farmers. Awareness and participation in the Pact for Skills are moderate and uneven, and systemlevel traction is limited without stronger national anchoring. Monitoring is predominantly annual, which constrains short-cycle learning in a seasonal sector. In response, the report advances a coherent package: sectoral joint committees with a minimum mandate; baseline collective-bargaining clauses on needs assessment, paid learning time, and recognition; a credential pathway linking informal learning to micro-credentials and RPL; paid leave and vouchers for farmers and micro-holdings; blended finance with outcome-linked eligibility; a Pact for Skills contact point embedded in joint governance; and a quarterly KPI dashboard with standard definitions and improvement triggers.

Keywords: Social dialogue; agriculture; lifelong learning; vocational education and training; Pact for Skills; governance; funding.

Acknowledgements: This project has received funding from the European Union under grant agreement no. 101102353 for the research project Social dialogue for Skills.

1. Introduction

The agricultural sector represents one of the strategic pillars of the European Union, both in terms of food security and rural territorial balance. However, it is facing structural challenges such as climate change, digital transformation, demographic ageing, labour shortages, and market volatility (European Commission, 2020, 2021a). These transitions require a systematic reinforcement of skills, reskilling, and lifelong learning across the entire agri-food value chain. For this transformation to be inclusive and sustainable, training systems must be embedded within strong frameworks of social dialogue, ensuring that social partners—employers' organisations, trade unions, cooperatives, and other stakeholders—play a co-responsible role in shaping vocational education and training (CEDEFOP, 2022; ILO, 2023).

This Deliverable 3.3 builds upon the findings of the two previous studies conducted in the SD4S project. Deliverable 3.1 provided a structural analysis of social dialogue in agriculture, highlighting the institutional imbalances between Member States, weak consultation rights, and the limited resources available for social partners to engage effectively. It revealed a fragmented and often under-resourced environment, especially when compared to more established sectors like manufacturing or ICT. This indicates that governance deficits hinder the ability of social partners to support lifelong learning effectively.

Deliverable 3.2 expanded the analysis by surveying national organisations from GEOPA-COPA and EFFAT to assess the state of lifelong learning and participation in the Agri-food Pact for Skills. The results indicated that while two-thirds of the organisations reported having training schemes, the provision of these schemes was fragmented, with a greater emphasis on informal learning rather than accredited programs. The skills needed were identified as closely linked to the green and digital transitions. However, incentives for participation were limited, particularly for farmers, and funding primarily relied on EU and public resources. Additionally, awareness of the Pact was limited, and the role of collective bargaining in establishing training rights was minimal.

These findings highlight a dual challenge. On one hand, there is an explicit acknowledgment of the importance of lifelong learning and sector-specific upskilling, in line with EU policy frameworks such as the European Skills Agenda (European Commission, 2020), the European Pillar of Social Rights (European Commission, 2021b), and the Osnabrück Declaration on Vocational Education and Training (Council of the European Union, 2020). On the other hand, the evidence gathered in reports D3.1 and D3.2 reveals ongoing institutional gaps, weak incentives, fragmented financing, and limited monitoring of key performance indicators (KPIs). These issues significantly undermine the transformative potential of the Pact for Skills.

The purpose of Deliverable 3.3 is to translate empirical insights into actionable policy recommendations. This study aims to create a roadmap for enhancing social dialogue as a governance tool for skills in agriculture. It seeks to ensure that vocational education and training are more inclusive, resilient, and aligned with Europe's ecological and digital transitions.

2. Context and theoretical framework

European agriculture is undergoing a complex transformation influenced by climate change, digitalisation, an ageing population, labour shortages, and market volatility. These challenges impact productivity and competitiveness, as well as territorial cohesion and food security, highlighting the importance of skills policy in enhancing the sector's resilience. At the EU level, the European Skills Agenda positions lifelong learning as a key driver of the green and digital transitions. It advocates for stronger partnerships among public authorities, social partners, education and training providers, and businesses (European Commission, 2020). The Osnabrück Declaration supports this vision by promoting a renewed governance of vocational education and training (VET) and recognising the vital role of European and national social partners in guiding reforms from 2021 to 2025 (Council of the European Union, 2020). Together, these frameworks uphold a tradition of social partnership, demonstrating that skills governance is not merely a technical process but is rooted in negotiated, rules-based cooperation.

Lifelong learning in the context of European policy includes formal and informal opportunities for individuals to acquire, update, and recognise knowledge, skills, and competencies throughout their lives. The value of lifelong learning depends on three interconnected qualities: quality assurance, recognition, and portability. When quality is clear, recognition is credible, and credentials are transferable across labour markets, individuals and businesses are more likely to invest time and resources in learning. CEDEFOP's research on the future of vocational education and training (VET) and governance indicates that systems are most effective when these three qualities are integrated into their design from the beginning, rather than being added later as an afterthought (CEDEFOP, 2020; CEDEFOP, 2023). This means that sector-specific training infrastructures should focus on standard-setting, pathways to micro-credentials, credit accumulation, and the routine recognition of prior learning, rather than simply offering courses.

Social dialogue serves as the institutional mechanism that makes certain qualities predictable. In the European model, negotiation, consultation, and structured information exchange between employers and workers—often involving public authorities—provide legitimacy, continuity, and alignment with the labour market for training systems. CEDEFOP's governance analyses and broader labour literature converge on a practical claim: when social partners co-govern vocational education and training (VET) through joint committees, statutory consultations, and collective bargaining, training rights can be established, time for learning can be ensured, and co-funding can be stabilised (CEDEFOP, 2022; ILO, 2024). Dialogue helps reduce transaction costs by pooling information on skill needs; it addresses time inconsistency by embedding commitments within agreements; and it enhances allocative efficiency by aligning curricula and qualifications with work organisation. Such arrangements are also consistent with Europe's long-standing institutional memory in industrial relations, which values continuity, predictability, and incremental improvement.

The European Pillar of Social Rights Action Plan introduces a quantitative target by aiming for 60% of adults to participate in annual training by 2030, a goal that was endorsed by EU leaders in Porto. This target serves as a coordination tool for Member States and various sectors, establishing a common objective while allowing national and sectoral actors the freedom to

design their own approaches. Importantly, it links skills policy to social objectives, connecting employability with fairness and inclusion. This link is particularly relevant in rural and agrifood contexts, where seasonal work patterns, small operations, and dispersed workplaces can make access to learning challenging (European Commission, 2021b). In this framework, lifelong learning is not just seen as a means to enhance productivity but also as a social right that must be negotiated and monitored.

The Pact for Skills is a framework designed to enhance partnerships on a large scale. Launched in 2020, it encourages stakeholders in key ecosystems to commit to shared goals for upskilling and reskilling, pool resources, and share best practices under a unified initiative. In the agrifood sector, the Pact acknowledges both the high skill requirements (such as agronomy, biotechnology, and food science) and the ongoing gap between educational curricula and industry needs. It also recognises the challenges posed by recent disruptions—from the COVID-19 pandemic to geopolitical tensions—which have increased pressure on these systems. Consequently, the Pact advocates for flexible training options, the recognition of prior learning, and the use of blended funding sources (European Commission, 2020; European Commission, 2025; CEMA, 2022). As a meta-governance tool, the Pact complements rather than replaces existing national or sectoral frameworks. It serves as a platform that reduces fragmentation, clarifies priorities, and connects commitments to funding and monitoring efforts.

A framework for agricultural skills that is both future-oriented and respectful of traditions can be developed without relying on project-specific datasets. This framework is based on three key propositions grounded in EU policy and comparative vocational education and training (VET) research.

First, dialogue as a backbone: Skills policy is most effective when social partners and public authorities collaboratively define rights, responsibilities, and resources. This requires the establishment of predictable mechanisms such as joint committees at the sectoral level, statutory information and consultation processes, and bargaining clauses that allocate time for learning, recognition pathways, and joint monitoring. These mechanisms help translate general principles into enforceable entitlements while accommodating national diversity (CEDEFOP, 2022; Council of the European Union, 2020).

Second, recognition-centred lifelong learning: The agricultural sector needs flexible training formats that accommodate seasonal work and the realities of small units. However, this flexibility must be linked to credibility. Implementing micro-credentials that align with sectoral standards, facilitating credit accumulation across different providers, and systematically recognising prior learning can transform participation into a portable value, rather than treating it as isolated episodes (CEDEFOP, 2020; European Commission, 2020).

Third, anchored EU coordination: The Pact for Skills can effectively guide priorities and consolidate commitments only if it is integrated into national frameworks that map available provisions, pool resources, work with VET authorities, and publish annual skills plans with common key performance indicators (KPIs). The European Pillar's target on adult training serves as an external benchmark against which ecosystems can calibrate their development trajectories (European Commission, 2021b; European Commission, 2025).

These propositions lead to specific design choices. In terms of incentives, European practices highlight two key levers with significant impact: time and recognition. "Time" is managed through negotiated paid training leave, which allows for seasonal flexibility and predictable scheduling. "Recognition" is achieved through clear pathways for credentialing and transparency tools that make the learning process understandable for both employers and workers. When these two elements are in place, participation is less reliant on individual choices and more influenced by institutional rules.

Regarding financing, European Vocational Education and Training (VET) systems often combine public funding with sectoral resources negotiated by social partners, sometimes through light levies or organised consortia. This approach stabilises provision across various cycles. The Pact's coordination role includes signalling priorities eligible for EU and national funds while promoting shared financial responsibility—a strategy that aligns with the tradition of cooperative financing without undermining subsidiarity (European Commission, 2020; CEDEFOP, 2023). For monitoring, the system employs quarterly dashboards tracking a small core of Key Performance Indicators (KPIs) such as participation rates, hours per participant, completion rates, and credentials issued.

The framework also clarifies how to resolve everyday tensions in education and training. The distinction between formal and informal learning is not a simple choice; both informal and workplace learning are essential in agriculture. The challenge lies in connecting these forms of learning to recognised qualifications.

To address the balance between national diversity and EU coherence, meta-governance is employed: the EU establishes shared goals and platforms (such as the Skills Agenda, Pillar, and Pact), while Member States and sectors design context-sensitive pathways. The framework also balances short-term responsiveness with long-term capacity by embedding rights to training and funding rules within dialogue institutions, rather than relying on discretionary projects. In each case, the proposed solutions reflect a European preference for incremental, rules-based coordination. This approach honours past practices while effectively addressing new challenges.

When applied to agriculture, this tradition-aware model has practical implications. Sectoral social dialogue bodies should be required to: (a) carry out joint skills anticipation aligned with regional development strategies; (b) agree on baseline clauses regarding training leave, recognition pathways, and joint monitoring; (c) identify providers and ensure that their offerings meet the needs of the ecosystem; and (d) manage blended financing with clear eligibility and quality criteria. Vocational Education and Training (VET) authorities should codevelop micro-credential frameworks that facilitate modular progression from non-formal to formal qualifications. Pact governance should mandate the annual publication of ecosystem skills plans and periodic reporting on common Key Performance Indicators (KPIs), promoting peer learning among Member States and ecosystems. While none of these instruments are new—all are utilised in European practice—the innovation lies in their disciplined application to the agri-food context, which includes factors such as seasonality, small farms, and dispersed workplaces. This ensures that the sector's structural constraints are recognised without

becoming excuses for inaction (European Commission, 2020; Council of the European Union, 2020; CEDEFOP, 2022).

The framework positions agricultural skills within a broader European social contract. Skills are viewed as both a lever for productivity and a social right. Social dialogue serves as both a method and a constitutional norm of the European model, while EU coordination acts as a resource mobilizer and a guardian of cohesion.

In this context, the approach aims to consolidate the tools that Europe already knows how to use—such as dialogue, recognition, co-funding, and monitoring—and apply them rigorously to the realities of the agricultural sector. This strategy allows agriculture to transition from a series of disconnected initiatives to a cohesive system that consistently provides inclusive upskilling and reskilling over time.

3. Methodology

3.1 Design and scope

This report is a policy-oriented synthesis that integrates two comparative surveys: (i) an EU-wide questionnaire on institutional features of sectoral social dialogue in agriculture, and (ii) a questionnaire on lifelong learning and the Pact for Skills among sectoral social partners. Given the unequal number of responses and the non-overlapping composition of respondents across waves, no microdata merging or record-level linkage has been performed. Evidence is integrated in parallel, through conceptual triangulation and comparative narration, privileging aggregate inference over subgroup claims to protect validity.

3.2 Population and data collection

The first survey targeted all social dialogue stakeholders active in EU agriculture. Social partner directories were used to contact the full membership of EFFAT and GEOPA-COPA; additional employer associations and unions meeting statutory representativeness thresholds were invited. A census approach was applied within federations, and purposive inclusion was applied outside them. Data were collected online (LeSphinx) via personalised links and reminder waves; responses were anonymous, only non-identifying metadata were retained, and GDPR rules applied. These procedures minimise cross-national recruitment bias and preserve confidentiality.

The second survey addressed national affiliates of the same social partners to capture organisational capacity, programme delivery, the role of collective bargaining, areas for improvement in the Pact, and monitoring practices. Fieldwork followed the same online mode and contact protocol, ensuring procedural symmetry across waves.

3.3 Instruments and indicators

The social-dialogue instrument comprised eight thematic blocks and mixed item types (single choice, multiple choice, 5-point Likert, categorical numeric, open text) with conditional branching to reduce fatigue and enhance relevance. Expert-validated translations produced six language versions to control semantic drift in a cross-national setting.

The lifelong-learning instrument covered organisational profile and capacity, delivery formats, the role of social partners and collective bargaining, perceived gaps in the Pact, and monitoring practices. D3.3 adopts the KPI taxonomy defined in the lifelong-learning survey as a reference vocabulary only—to standardise terminology when discussing indicators (e.g., numeric absolute, numeric relative, Likert, nominal/qualitative) and reporting frequency patterns. This standardisation does not imply any statistical fusion of datasets.

3.4 Data processing and analytical strategy

Quality control in each wave followed a two-stage protocol: removal of incomplete, duplicate, or out-of-range cases, followed by intra-block consistency checks prior to analysis. Open

responses were thematically recoded; qualitative variables were dichotomised or ordinalised when needed to align with each survey's comparative design.

Harmonisation in D3.3 is conceptual, not record-level. A concordance table aligns constructs and terminology (e.g., consultation rights; training-needs assessment; incentive types; KPI classes) to enable side-by-side interpretation. However, no joint tabulations or pooled estimates are produced. The analytical strategy privileges aggregate reporting because documented imbalances by actor type and geography in the second survey, combined with non-overlapping respondent sets, could yield spurious contrasts if directly compared. Disaggregation is retained as an illustrative robustness check only. Quantitative items are summarised with frequencies, shares, and means within each wave; qualitative material is thematically grouped and mapped to four policy levers used throughout D3.3: governance, incentives, finance, and monitoring.

3.5 Ethics, limitations, and quality assurance

Participation in both waves was voluntary and anonymous; collection and processing complied with GDPR. Reporting in D3.3 aggregates information to prevent re-identification of organisations.

Limitations derive from non-probability coverage of finite universes, low response, and actortype and regional imbalances in the second, plus the non-overlap of respondents across waves. External validity is therefore constrained, and subgroup inference is limited. D3.3 treats aggregate patterns within each wave as conservative baselines and frames any cross-wave contrasts as conceptual triangulation, not as statistical comparison. The predominance of annual KPI tracking also restricts within-year learning, motivating the recommendation of a quarterly operational cadence.

Quality assurance rests on documented translation control, standardised contact protocols, and explicit aggregation rules. For reproducibility, this report provides two separately cleaned datasets (one per survey), a concordance/codebook that maps constructs and indicator classes across instruments, and an analytic appendix detailing aggregation, recoding, and robustness checks used for the parallel synthesis. Future iterations should correct composition imbalances ex ante through intensified mobilisation, staggered fieldwork windows, and, if necessary, soft quotas by actor type and region; where feasible, a panel or re-contact design would allow controlled longitudinal comparisons without forcing micro-data linkage across distinct respondent pools.

4. Results

This chapter summarises and reinterprets the key policy findings from earlier reports. We present a curated selection of figures that provide the most significant explanatory value for decision-making. The analyses of D3.1 (the institutional basis of social dialogue) and D3.2 (lifelong learning and the Pact for Skills) should be examined together. We do not perform numerical cross-wave comparisons due to variations in respondent populations and sample sizes. Each figure is presented with its corresponding population or, failing that, the relative weight of each value, followed by a brief analytical interpretation and its operational implications.

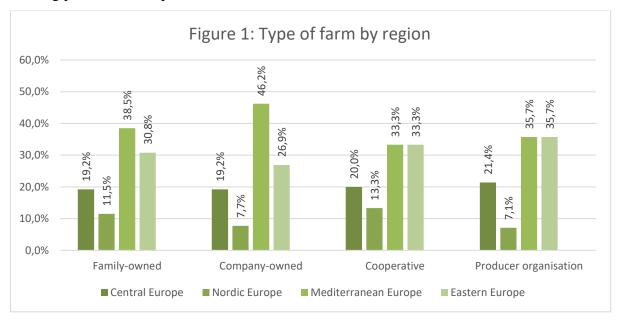
4.1 Institutional foundations of sectoral social dialogue

Using evidence from the SD4S–Q1 cross-national survey, this section outlines the governance structure that affects training policies in agriculture, emphasising both enabling and constraining factors. We begin by examining the productive context, including the distribution of farm types by region, because organisational forms condition who is represented in dialogue, how consultation bodies operate, and which training arrangements are feasible. Next, we identify the social partners involved in negotiations and consultations, as well as the areas where they hold effective mandates, such as training and occupational safety and health. We then document the public legal and financial support systems that enhance dialogue capacity, and finally highlight the obstacles and perceived benefits reported by stakeholders. Together, these elements clarify institutional density, the range of competencies held by social partners, and the conditions necessary to establish training rights and programmes.

Figure 1 provides the structural baseline for this governance reading by cross-tabulating farm types with their regional distribution. Family farms and business-owned farms each receive 26 mentions; however, their prevalence varies by region. Family farms are predominantly located in Southern Europe (38.50%) and Eastern countries (30.80%), while they are less common in Central Europe (19.20%) and minimal in the Nordic region (11.50%). In contrast, business-owned farms are most prevalent in the Mediterranean (46.20%), remain significant in Eastern Europe (26.90%), and are scarce in the North (7.70%), suggesting a trend toward businessisation linked to professionalisation and access to external investment. Cooperative farms and producer organisations show a more consistent pattern in the Mediterranean and Eastern regions, with cooperatives representing 33.30% in both areas and producer organisations at 35.70%. This indicates consolidation of associative structures as resilience mechanisms against structural fragmentation and market volatility. By comparison, these collective models are less represented in Central and especially Nordic Europe, which may reflect institutional differences, a stronger emphasis on individual farm models, or higher levels of automation and concentration.

In terms of sample coverage, the Mediterranean accounts for 42.90% of observations, while Eastern Europe represents 31.40%. As a result, the findings primarily reflect the agricultural realities of Southern and Eastern Europe. Overall, the distribution highlights a persistent tension between tradition and modernisation, as well as the coexistence of family, corporate, and

associative models that influence the governance of rural work and the framework within which training policies must operate.



Source: Own elaboration based on data from the SD4S project.

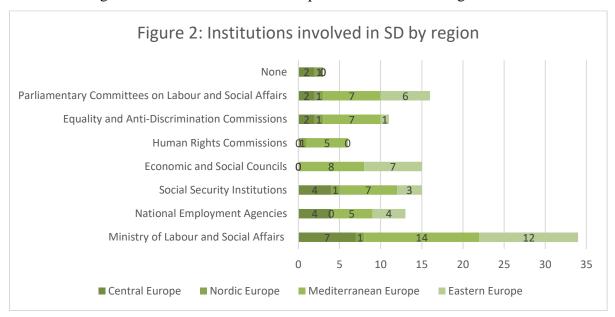
According to Figure 2, the institutional landscape in which agri-food social partners operate spans a wide array of relationships, with strong links to traditional administrative bodies (notably ministries of labour) and growing engagement with social councils, parliamentary committees, and equality bodies. In total, 34 instances of institutional relations are reported, concentrated in Mediterranean Europe (15) and Eastern Europe (12), with fewer in Central Europe (6) and the Nordic region (2).

The Ministry of Labour and Social Affairs emerges as the main interlocutor, with 14 cases in the south and 12 in the east, and fewer in the centre (7) and north (1). This pattern confirms that the articulation of social dialogue in the agri-food sector still pivots around the ministerial apparatus as a central node of labour governance in many contexts. National employment agencies also appear regularly—five in the Mediterranean, four in Eastern Europe, and four in Central Europe—while they are not mentioned in the Nordic bloc, pointing to regional contrasts in activation and intermediation policies.

Social security institutions are referenced in 15 cases, led by the south (7) and centre (4), with a lower incidence in the east (3) and north (1). Economic and Social Councils play a prominent role in the Mediterranean (8) and Eastern Europe (7), indicating consolidation of tripartite dialogue in these regions. Equality and anti-discrimination bodies are cited 11 times, especially in the Mediterranean (7). Parliamentary committees on labour and social affairs are mentioned 16 times overall, concentrated in the south (7) and east (6), with fewer in the centre (2) and north (1), signalling increasing interaction with the legislative branch in those areas.

Notably, three cases—two in Central Europe and one in the north—report a complete absence of institutional relations (8.8% of all cases), highlighting contexts where social partners still operate outside formal channels, with limited influence and political recognition. Overall, the data depict sectoral social dialogue that remains anchored in traditional administrative and consultative structures while progressively incorporating ties to parliamentary and

fundamental-rights bodies. The Mediterranean and Eastern regions stand out for higher institutional density. In contrast, Northern and Central Europe display more fragmented or less formalised models—an important consideration when strengthening the institutional legitimacy of social dialogue under the CAP and the European Pillar of Social Rights.



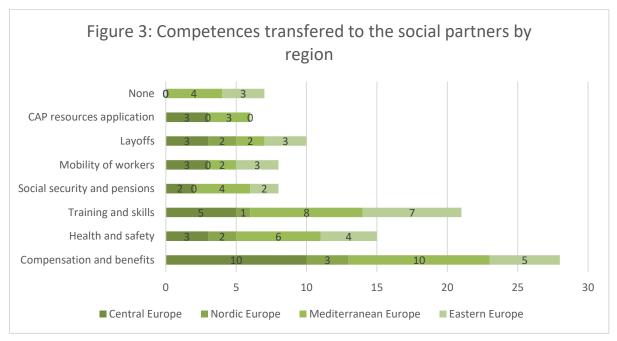
Source: Own elaboration based on data from the SD4S project.

The data presented in Figure 3 reveal that the powers transferred to social partners in the agrifood sector vary significantly across Europe, both in terms of quantity and type. Specifically, the Mediterranean region shows the highest level of delegation with 15 cases, followed by Eastern Europe with 11 cases, together accounting for more than three-quarters of all instances. In contrast, Central Europe has six cases, while the Nordic region only has two, highlighting a lower level of institutionalisation in the latter.

Compensation and benefits are the most frequently transferred competence, with 28 cases overall: 10 in both Central and Mediterranean Europe, 5 in Eastern Europe, and 3 in the North. Occupational health and safety follows with 15 cases—6 in the Mediterranean, 4 in the East, 3 in the Centre, and 2 in the North—suggesting that, although EU regulation is mature, participatory management is more firmly embedded in Southern Europe. Vocational training and qualifications also feature prominently, with 21 cases (8 South, 7 East, 5 Centre, 1 North), indicating a larger role for social partners in managing skills agendas in regions with more fragmented or transitional labour structures.

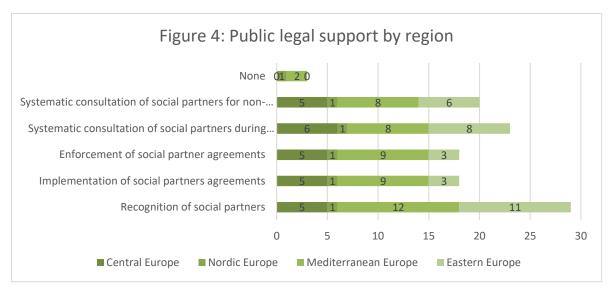
For worker mobility, the distribution is balanced between Central and Eastern Europe (3 each), with the South at 2 and the North at 0. Powers over redundancies and restructuring appear similarly in Central and Eastern Europe (3 each), and at lower levels in the South and North (2 each), pointing to more ad hoc or bounded roles. Functions linked to CAP resource management are reported in six cases, exclusively in Central and Mediterranean Europe (three each), with no mentions in the East or North, consistent with longer traditions of institutionalised participation and more technical aid-distribution frameworks in those countries. In seven cases—four in the South and three in the East—no competences are transferred at all, signalling settings where social dialogue does not yet translate into operational authority.

Overall, the evidence indicates that transferred competences vary in both number and nature by region. The Mediterranean and Eastern blocs concentrate the highest attribution, especially in training, OSH, and compensation; Central Europe occupies an intermediate position; and the North remains at a low level of transfer, likely for structural or institutional reasons. This asymmetry poses practical challenges for implementing the Pact for Skills and for strengthening the social dimension of the CAP, since the policy influence of social partners depends directly on the scope of powers assigned to them.



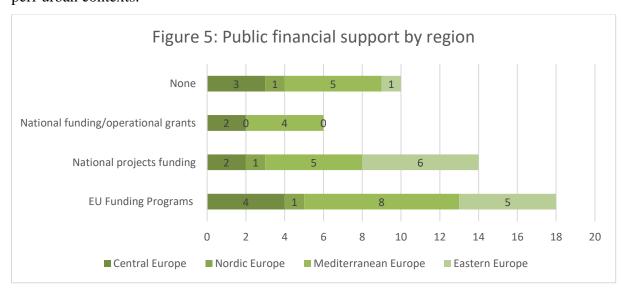
Source: Own elaboration based on data from the SD4S project.

Figure 4 indicates marked regional variation in the legal recognition and institutional support afforded to agri-food social partners, with clearer consolidation in Mediterranean and Eastern countries. The figure counts 34 cases overall, distributed as 15 in the Mediterranean, 11 in the East, six in Central Europe, and two in the Nordic region. It also records 29 instances of explicit recognition—12 in the South, 11 in the East, five in the Centre, and one in the North—showing that most surveyed actors operate with some form of legal validation, a prerequisite for policy influence. Data in the same figure place implementation of agreements at 18 mentions (nine South, five Centre, three East, one North), and the enforceability of those agreements follows the identical pattern, implying that where implementation exists, it is typically backed by legal force. Legislative consultation is reported in 23 cases (eight South, eight East, six Centre, one North), while non-legislative consultation appears in 20 (eight South, six East, five Centre), signalling a broad—if uneven—practice of participatory governance. Notably, three entries two in the South and one in the North-show a complete absence of public support or legal recognition (8.8% of the total), highlighting residual institutional gaps that can limit effective sectoral dialogue even where formal structures exist. Taken together, the evidence in Figure 4 portrays stronger, more formalised support in the Mediterranean, and weaker or more informal models in the North, underscoring the need to bolster public backing to enhance effectiveness, regulatory capacity, and alignment with the European Pillar of Social Rights and the Rural Pact.



Source: Own elaboration based on data from the SD4S project.

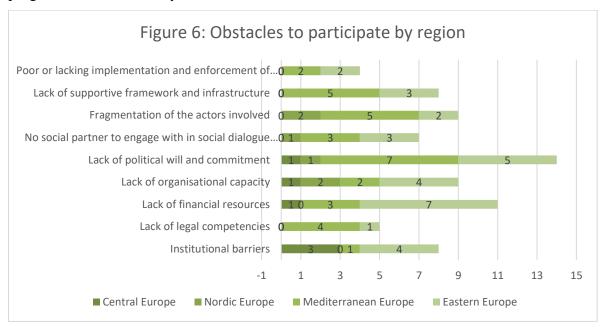
According to Figure 5, there are a variety of public funding mechanisms for social partners in the agri-food sector, with a total of 33 cases led by the Mediterranean (15), followed by Eastern Europe (10), Central Europe (6) and the Nordic region (2). EU programmes predominate with 18 mentions, mainly in the south (8) and east (5), and to a lesser extent in the centre (4) and north (1), suggesting greater access and alignment with CAP/Rural Pact priorities in those regions. National project funding appears in 14 cases (east 6, south 5, centre 2, north 1), pointing to decentralised support but divergent national frameworks. More structured national support – grants based on agreements or operating grants – occurs only six times (south 4, centre 2) and is absent in the east and north, limiting long-term sustainability. Ten cases (30.3%) report no public support whatsoever (south 5, centre 3, east 1, north 1), which hinders the professionalisation, autonomy and continuity of representative action in rural areas. Overall, most actors receive some funding, but only a subset have access to stable schemes, and a significant minority have none, creating heavy dependence on EU funds and a clear argument for consolidating national frameworks to ensure sustainable dialogue, especially in rural and peri-urban contexts.



Source: Own elaboration based on data from the SD4S project.

Figure 6 shows that obstacles to social dialogue are concentrated in the Mediterranean and Eastern Europe, which account for most responses: 26 mentions spread across nine categories, indicating a broader perception of structural barriers than in the table on the absence of benefits. The leading brake is a lack of political will and commitment (14 mentions: 7 South, 5 East), followed by a lack of financial resources (11, heavily in the East: 7), pointing to contexts where continuity of dialogue depends on narrow budget windows. Added to this are deficits in organisational capacity (9) and fragmentation of actors (9), which hinder effective representation and interest aggregation, alongside the absence of a support framework and infrastructure (8) that would standardise procedures, calendars, and support services. Institutional barriers also appear frequently (8; East 4, Centre 3), signalling diffuse rules or consultation mechanisms that are weakly operational.

Governance design problems complete the picture: insufficient legal powers (5), lack of adequate interlocutors (7), and weak implementation of agreements reached (4). Taken together, the evidence suggests that, when specifically asked about obstacles, stakeholders identify a wide array of difficulties that combine shortfalls in public commitment, material constraints, and procedural bottlenecks. The regional clustering further indicates that the effectiveness of dialogue hinges on strengthening enabling conditions—predictable financing, minimum organisational capacity, and consultation and enforcement frameworks with legal backing—so that the process shifts from episodic to routine and can anchor training rights and programmes more reliably.

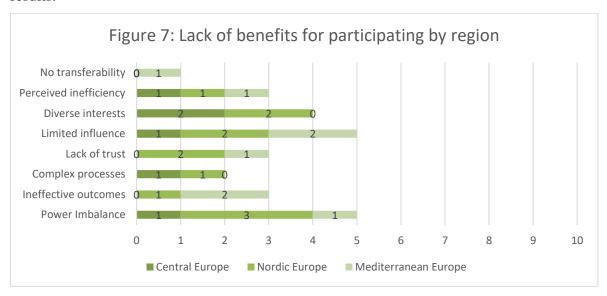


Source: Own elaboration based on data from the SD4S project.

Explicit criticism of social dialogue is the exception rather than the rule in the European agrifood sector. Figure 7 records only seven mentions of a "lack of benefits," spread across Central, Mediterranean, and Eastern Europe, indicating that most stakeholders either do not perceive significant shortcomings or do not articulate them. Within this small set, responses cluster around "power imbalance" and "limited influence" (five mentions each), followed by "diverse interests" (4), "ineffective results" (3), "lack of trust" (3), "perceived inefficiency" (3), "complex processes" (2), and "lack of transferability" (1). Because categories are not mutually

exclusive, totals exceed the number of cases. Still, the pattern is clear: when criticism appears, it targets asymmetries of power and a limited ability to shape outcomes.

The low intensity and dispersed geography of these responses constrain any robust regional inference. They can be read as implicit support for the current operation of dialogue, or as limited critical engagement. In either interpretation, the small base warrants caution. These perceptions do not negate the usefulness of social dialogue; they point to priorities: correct power imbalances, improve effective channels of influence, and strengthen the traceability of results.



Source: Own elaboration based on data from the SD4S project.

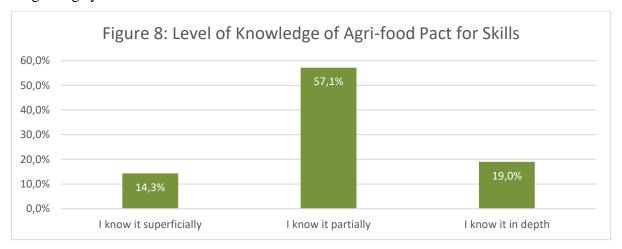
4.2 Lifelong learning systems and the Pact for Skills

Drawing on evidence from the SD4S–Q2 cross-national survey, this section describes how training is organised and which incentives, funding arrangements, and bottlenecks shape participation. We begin with coverage and levels of implementation (national, regional, company) and the mix of delivery formats (online, face-to-face, on-the-job, webinars). We then examine the balance between informal and formal provision to illuminate the recognition—speed trade-off. We relate this to the presence of training-needs clauses and paid training leave in collective bargaining. Next, we summarise compensation patterns for farmers and employees, followed by sources of funding and the main obstacles organisations report. Finally, we turn to the Pact for Skills, presenting SD4S–Q2 evidence on awareness, participation, perceived benefits, transferability within and beyond agri-food, and the extent to which the Pact is seen to reinforce social dialogue. The arc of this section shows why activity does not always translate into portable value and where targeted levers—recognition pathways, time and cost incentives, blended finance—can shift outcomes.

The awareness level of the Agri-food Pact for Skills, as illustrated in Figure 8, remains limited and varies among respondents. A majority of organisations (57.1%) report having only a partial understanding of the Pact, while 19.0% claim to comprehend it in depth, and 14.3% acknowledge having only a superficial knowledge of it. This distribution indicates that,

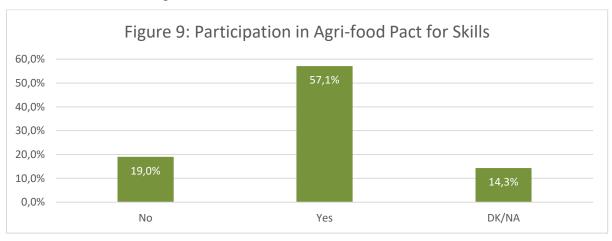
although the Pact has gained some visibility, a comprehensive understanding is limited to a minority of stakeholders.

The prevalence of partial knowledge suggests that many organisations recognise the Pact as a general policy framework but lack the detailed understanding needed to translate its principles into effective training strategies. This limited in-depth awareness poses a barrier to national implementation, as it restricts the ability of social partners to engage proactively, allocate resources effectively, and integrate Pact commitments into vocational education and collective bargaining systems.



Source: Own elaboration based on data from the SD4S project.

Participation in the Agri-food Pact for Skills is reported by a majority of respondents, with 57.1% indicating their involvement, as illustrated in Figure 9. However, 19.0% of organisations state that they are not engaged, and 14.3% either do not know or did not provide an answer. This distribution highlights both encouraging levels of mobilisation around the Pact and the ongoing gaps in engagement across the sector. The combined percentage of those not participating, along with those uncertain about their involvement, amounts to one-third of the sample. This suggests that awareness and integration of the Pact remain incomplete at the national level. These findings reinforce the view that, although the Pact has established itself as a relevant framework, its reach is uneven, and its capacity to engage all social partners in the agri-food sector is still limited. Expanding participation will require not only broader communication efforts but also stronger institutional connections between EU-level initiatives and national social dialogue mechanisms.

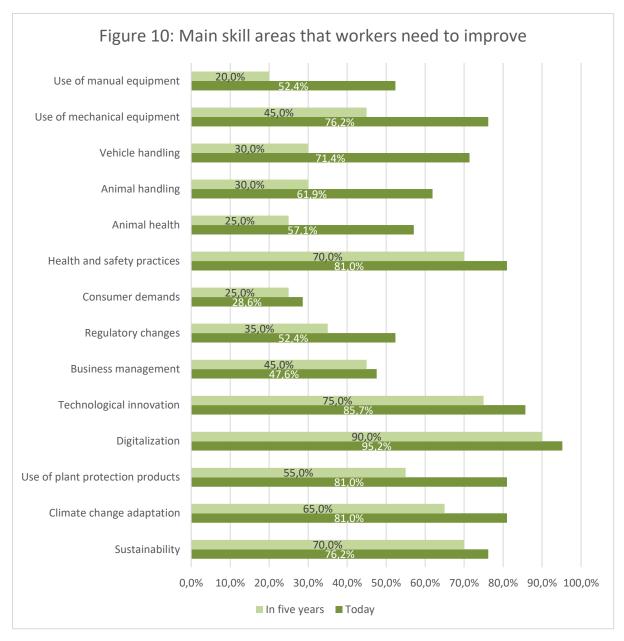


Source: Own elaboration based on data from the SD4S project.

The analysis of skill needs reveals a dual focus on current gaps and future priorities, as illustrated in Figure 10. Currently, the most pressing areas for improvement include digitalisation (95.2%), technological innovation (85.7%), the use of mechanical equipment (76.2%), and sustainability (76.2%). Additionally, essential domains like health and safety practices (81.0%) and climate change adaptation (81.0%) are also emphasised. In contrast, more traditional skills, such as the use of manual equipment (52.4%) or animal health (57.1%), receive comparatively less attention.

Looking five years ahead, the profile of skill needs shifts. While digitalisation and technology remain central (90.0% and 75.0%, respectively), there is a notable increase in the importance assigned to transversal and future-oriented skills. These include sustainability (70.0%), climate change adaptation (65.0%), and consumer demands (rising from 25.0% to 28.6%). This trend suggests that the agricultural sector anticipates a gradual shift from purely technical competencies to broader capabilities needed for ecological transition, regulatory pressures, and market changes.

The results emphasise the urgent need to embed digital and environmental skills into lifelong learning strategies while ensuring that traditional skills continue to develop, especially in areas where foundational operational capacities remain a challenge.



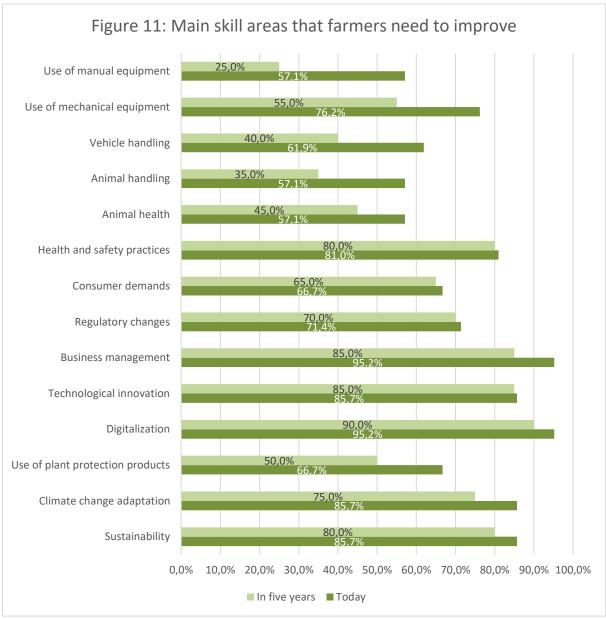
Source: Own elaboration based on data from the SD4S project.

The skills gap among farmers reveals a profile that is both broader and more future-oriented compared to the needs reported for workers. Currently, the most pressing priorities for farmers include digitalisation (95.2%), business management (95.2%), technological innovation (85.7%), and climate change adaptation (85.7%). Sustainability is also a significant focus, ranking high at 85.7%. Farmers see skills not only as operational tools but also as strategic assets for managing their farms in increasingly complex economic and environmental contexts.

Looking ahead to the next five years, the importance of sustainability (80.0%), climate change adaptation (75.0%), and regulatory compliance (70.0%) remains critical. In contrast, traditional skills, such as the use of manual (57.1%) or mechanical (76.2%) equipment, animal handling (57.1%), and animal health (57.1%), continue to be relevant but are considered less essential.

This evolution suggests a shift in focus from technical and operational skills toward managerial, environmental, and digital competencies, which are vital for navigating ecological transitions,

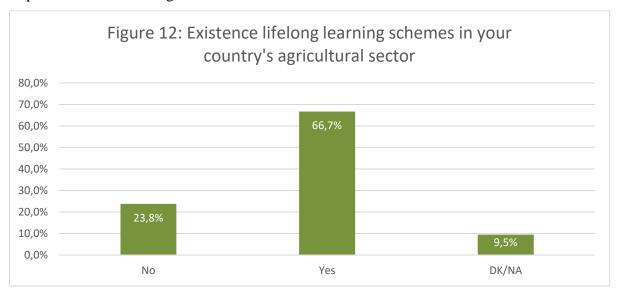
market volatility, and regulatory changes. The comparison with workers' training needs indicates that farmers are already anticipating higher-level skills related to governance and strategy, reflecting their dual role as both producers and decision-makers within the agri-food system.



Source: Own elaboration based on data from the SD4S project.

As part of the analysis of training structures in the agri-food sector, Figure 12 provides an overview of the availability of lifelong learning schemes at the national level. Two-thirds of the surveyed organisations (66.7%) report that such schemes are in place, while nearly one-quarter (23.8%) indicate their absence, and 9.5% responded with "do not know/not applicable." This distribution suggests that, while lifelong learning is institutionalised in many national contexts, significant disparities remain across Member States. The proportion of negative responses highlights ongoing gaps in the availability of structured training opportunities. Additionally, the share of respondents who were unable to confirm the existence of these schemes points to limited visibility or weak communication about these initiatives. Overall, the data indicate that,

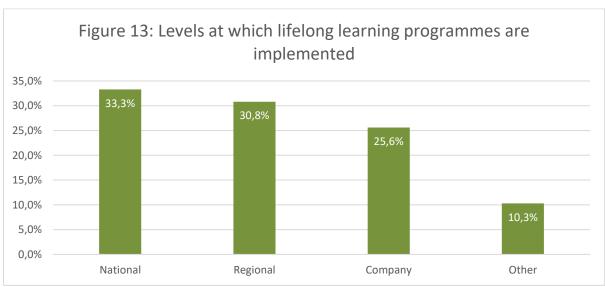
although lifelong learning is broadly recognised, its coverage is far from universal. This raises concerns about uneven access and the potential limitations it imposes on the effective implementation of the Agri-food Pact for Skills.



Source: Own elaboration based on data from the SD4S project.

The distribution of lifelong learning initiatives across different levels of governance provides a well-balanced overview, as shown in Figure 13. National schemes are the most frequently reported, accounting for 33.3% of the total, while regional programs closely follow with 30.8%. Company-based training represents just over a quarter of the cases at 25.6%. A smaller percentage of respondents (10.3%) identified other forms of implementation, indicating a level of experimentation beyond traditional frameworks.

This distribution suggests that responsibility for skills development in the agricultural sector is shared between state-led initiatives and workplace-based programs, reflecting a multi-level governance model. However, the coexistence of national, regional, and company-led programs raises important questions about coordination, coherence, and the effectiveness of alignment among these levels in supporting the objectives of the Pact for Skills.



Source: Own elaboration based on data from the SD4S project.

Training formats in the agricultural sector show a high level of diversity. Online courses, inperson workshops, and on-the-job training were each reported by 66.7% of respondents, as illustrated in Figure 14. This near-equal representation of the three modalities indicates that lifelong learning is being delivered through a balanced mix of digital, classroom-based, and experiential approaches.

Webinars also play a significant role, reaching 50% of the surveyed organisations, while 25% mentioned other types of training. The prominence of both online and face-to-face methods suggests that digitalisation has progressed without replacing traditional learning formats. Additionally, practical, work-based training remains central to skill development.

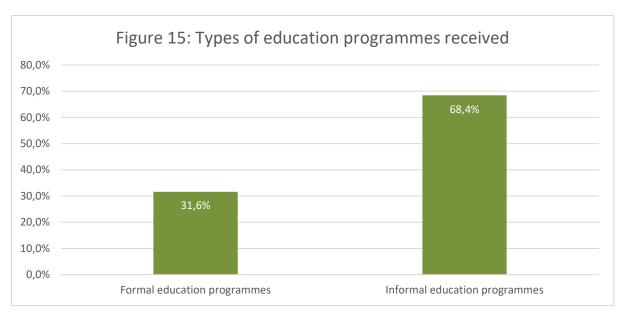
This combination of training modalities reflects an adaptive learning landscape. However, it also highlights the need for greater integration and coordination across different delivery channels to ensure consistency in quality and accessibility.



Source: Own elaboration based on data from the SD4S project.

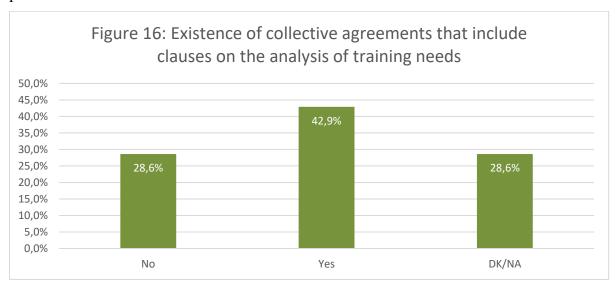
The balance between formal and informal education indicates a strong reliance on less structured training formats. According to Figure 15, over two-thirds of respondents (68.4%) reported participating in informal education programs, while only 31.6% had access to formal education. This disparity suggests that lifelong learning in the agricultural sector is primarily driven by flexible, practice-oriented initiatives, such as workshops, short courses, and on-the-job experiences, rather than through accredited or institutionalised education pathways.

While the predominance of informal learning reflects adaptability and responsiveness to immediate sector needs, it also raises concerns about standardisation, recognition of acquired skills, and long-term career development. Therefore, strengthening the connection between informal initiatives and formal certification systems could be crucial in ensuring that the skills gained contribute not only to immediate productivity but also to the professional advancement and mobility of the agricultural workforce.



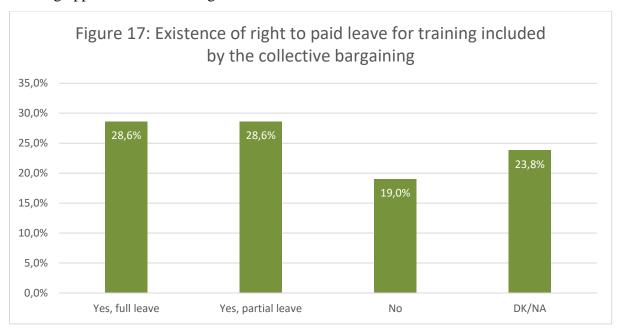
Source: Own elaboration based on data from the SD4S project.

The integration of training needs into collective bargaining is currently limited and varies significantly. As shown in Figure 16, 42.9% of respondents indicate that collective agreements in their context contain clauses addressing the analysis of training needs. In contrast, 28.6% reported that such provisions were absent, while another 28.6% either did not know or did not respond. This distribution reveals that fewer than half of the agreements formally address training requirements, suggesting that skills development is not yet systematically incorporated into labour negotiations across the agricultural sector. The relatively high percentage of "do not know/no answer" responses may also indicate a lack of transparency or awareness within organisations regarding the content of agreements, highlighting weak communication channels between negotiating bodies and their constituencies. Overall, the findings emphasise the fragmented connection between collective bargaining and lifelong learning, underscoring the need to strengthen institutional frameworks that link training policies with labour relations practices.



Source: Own elaboration based on data from the SD4S project.

The inclusion of paid leave for training in collective bargaining agreements is inconsistent, as illustrated in Figure 17. Only 28.6% of respondents report that full leave is guaranteed, while the same percentage indicates that partial leave is offered. In contrast, 19.0% state that no such right exists, and 23.8% either do not know or did not answer the question. This distribution highlights a lack of uniformity across national and sectoral agreements, with just over half of the cases providing some form of entitlement. At the same time, a significant minority leaves the issue unaddressed. The high rate of "do not know/no answer" responses suggests limited awareness of specific provisions, indicating poor dissemination of negotiated rights among stakeholders. Overall, these findings reveal that, although paid leave for training is recognised in certain contexts, its implementation is uneven, raising concerns about equal access to lifelong learning opportunities for the agricultural workforce.



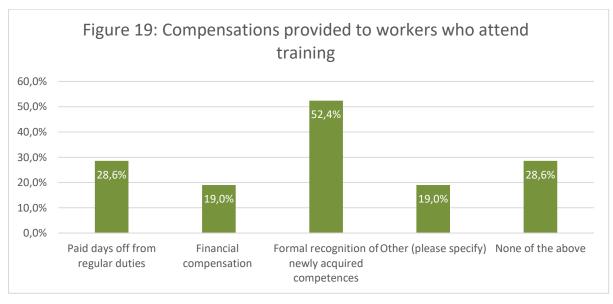
Source: Own elaboration based on data from the SD4S project.

Incentives for farmers to participate in training primarily focus on the formal recognition of newly acquired skills, as reported by 63.2% of respondents, as illustrated in Figure 18. Other forms of compensation are much less prevalent: only 15.8% mentioned paid time off from regular duties, 5.3% cited financial compensation, and another 15.8% referred to alternative arrangements. Notably, nearly one-third of organisations (31.6%) indicated that no form of compensation is provided at all. This distribution highlights the central role of credentialing as the main incentive mechanism while revealing the limited use of financial or time-related benefits to encourage participation. The lack of compensation in a significant number of cases suggests that, for many farmers, attending training may feel more like an added burden than an opportunity, potentially discouraging involvement. Strengthening incentive programs beyond mere recognition—by incorporating tangible financial or time-related support—could be essential for enhancing the attractiveness and inclusiveness of lifelong learning in the agricultural sector.



Source: Own elaboration based on data from the SD4S project.

The compensation mechanisms available to workers who participate in training reveal a broader variety of incentives compared to those for farmers. As illustrated in Figure 19, formal recognition of newly acquired skills is the most common form of compensation, accounting for 52.4%. Other benefits are more evenly distributed: 28.6% of respondents report receiving paid days off from regular duties, while 19.0% mention financial compensation, and another 19.0% refer to alternative arrangements. However, it is notable that 28.6% of organisations indicate that no compensation is provided. This distribution suggests that although credentialing remains the primary incentive, workers are more likely than farmers to receive tangible support, such as time off or financial rewards. Nonetheless, the significant percentage of individuals without any compensation highlights ongoing challenges in making training participation attractive and accessible. In contrast to farmers, workers benefit from more diversified support, while farmers tend to rely predominantly on recognition alone, reflecting different institutional and bargaining capacities within their sector.

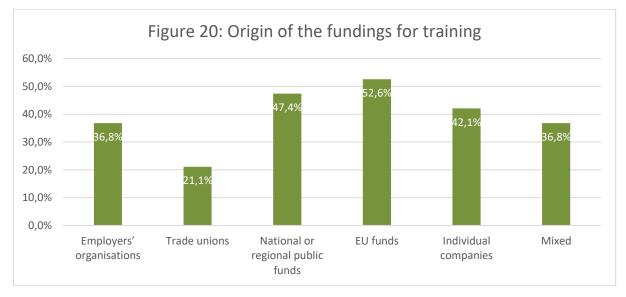


Source: Own elaboration based on data from the SD4S project.

The financing of training in the agricultural sector is highly fragmented, with various sources contributing unevenly, as shown in Figure 21. EU funds are the most significant source, accounting for 52.6% of funding, followed by national or regional public funds at 47.4%, and contributions from individual companies at 42.1%. Employers' organisations and mixed funding schemes each represent 36.8% of the funding sources, while trade unions contribute a more limited 21.1%.

This distribution highlights a strong reliance on public and EU-level financing, indicating the vital role of external institutional support in promoting lifelong learning initiatives. At the same time, the notable contributions from companies and mixed funding arrangements emphasise the increasing importance of shared responsibility among private entities. The relatively low involvement of trade unions suggests a weaker capacity to mobilise financial resources directly. This may lead to the limited incorporation of training within collective bargaining frameworks observed in other parts of the survey.

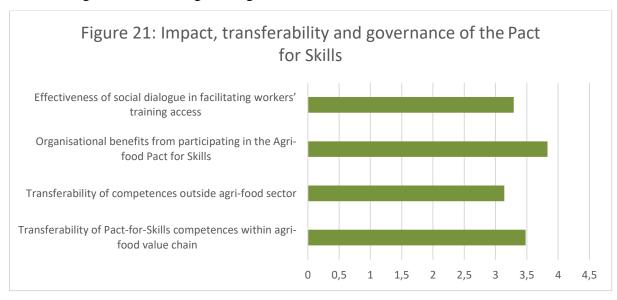
Overall, the data reveals both the variety of funding arrangements and the absence of a dominant, stable model, raising concerns about the long-term sustainability and coordination of training provision across the sector.



Source: Own elaboration based on data from the SD4S project.

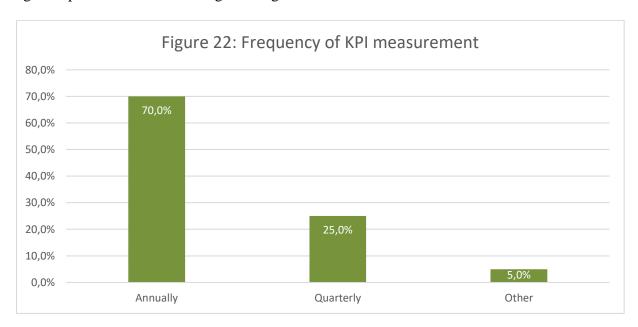
The evaluation of the Pact for Skills reveals generally positive perceptions, although there are variations across different aspects, as shown in Figure 21. Respondents give the highest score for the organisational benefits gained from participating in the Pact, which is 3.95 on a five-point scale. This suggests that many organisations have experienced tangible advantages from their involvement. The transferability of skills within the agri-food value chain is also rated positively at 3.50, indicating that the Pact is recognised as relevant for sector-specific roles. However, the transferability of these skills to sectors outside agri-food is rated slightly lower at 3.14, suggesting that the skills acquired are viewed as less portable beyond the immediate ecosystem. The effectiveness of social dialogue in facilitating access to training for workers receives a score of 3.33, indicating a moderate role for social partners that could be further enhanced. Overall, these results imply that the Pact is delivering value within the sector and

strengthening internal capabilities. Still, its broader impact—both across different sectors and in terms of governance through dialogue—remains limited.



Source: Own elaboration based on data from the SD4S project.

The measurement of training-related key performance indicators (KPIs) is primarily conducted annually, as reported by 70.0% of respondents (see Figure 23). A smaller percentage, 25.0%, monitors KPIs quarterly, while only 5.0% utilise alternative measurement frequencies. This distribution suggests that most organisations integrate KPI tracking into their yearly reporting cycle, which may be suitable for long-term monitoring but less effective in capturing short-term dynamics or making real-time adjustments to interventions. The limited use of quarterly measurements indicates that more frequent monitoring is underdeveloped, potentially hindering the ability of training strategies to respond to emerging needs. Therefore, enhancing regular and systematic KPI tracking could improve evidence-based decision-making and support a more agile implementation of lifelong learning initiatives.



Source: Own elaboration based on data from the SD4S project

5. Policy recommendations

These recommendations turn SD4S evidence into an operational programme for European agriculture. The starting point is clear: uneven institutional density of social dialogue, fragmented and weakly accredited training supply, insufficient time and cost incentives, volatile public financing, and annual monitoring that slows operational learning. The goal is to move from isolated projects to a stable system with predictable rules and common metrics. Measures are organised under seven levers: joint committees with a minimum mandate; bargaining clauses on needs, paid learning time, and recognition; a micro-credential and RPL pathway; time and cost supports for farmers and SMEs; blended finance with outcome-linked eligibility; a national Pact for Skills contact point embedded in governance; and a quarterly KPI dashboard with standard definitions and improvement triggers. Each proposal specifies actors, actions, functions, and objectives for ease of adoption and oversight.

5.1 Sectoral joint committees with a minimum statutory mandate

Involved actors: Ministries of Labour and Agriculture; employer associations; trade unions; public employment services.

Recommended actions: Create a permanent bipartite/tripartite committee as the sector's coordination hub. Approve clear operating rules (calendar, quorum, decision rules, public minutes). Keep a public registry of accredited programmes and providers.

Functions: (i) Anticipate skills needs using survey and administrative data; (ii) publish an annual training plan with seasonal windows and regional allocations; (iii) set minimum quality standards (learning outcomes, assessment, credential pathways); (iv) evaluate results (completion, credentials issued, coverage by actor type and holding size).

Objectives: Institutionalise a single coordination node; publish an annual sector training plan; harmonise provider quality standards; expand effective coverage and reduce fragmentation; strengthen accountability through public records.

5.2 Baseline collective-bargaining clauses on needs, paid learning time, and recognition

Involved actors: Sectoral and territorial bargaining tables; employer organisations; unions; labour inspectorate; VET authorities.

Recommended actions: Include three floor clauses in every agreement: annual needs assessment; paid training leave with seasonal flexibility; recognition through micro-credentials and recognition of prior learning (RPL). Define eligible training and access guarantees for part-time, temporary, and self-employed workers in cooperatives.

Functions: Set the needs-assessment process; secure the right to paid learning time and reimbursement; link courses to portable credentials (credits, rubrics, equivalences); provide dispute-resolution and compliance checks; report participation, completion, and credential data.

Objectives: Ensure every agreement covers needs, time, and recognition; guarantee effective paid learning time; convert training into portable credentials; protect equitable access for non-standard workers; enforce compliance and reporting.

5.3 Credential pathway from informal learning to portable value (micro-credentials and RPL)

Involved actors: National qualifications and VET authorities; cooperatives/producer organisations; HE/VET institutions; social partners via the joint committee.

Recommended actions: Adopt micro-credentials aligned with occupational standards and common metadata (outcomes, workload, level, assessment, credit). Make RPL operational to validate workplace learning. Enable credit accumulation and transfer toward full qualifications.

Functions: Maintain a focused sector catalogue (digitalisation, technology, OSH, sustainability/climate, farm management/regulation); define assessment rubrics and assessor requirements; accredit providers; run a secure registry of issued credentials; ensure low-income access to RPL and tailored support for SMEs and micro-holdings.

Objectives: Establish a recognised micro-credential catalogue; formalise workplace learning via RPL; enable stackable credit pathways; increase credential issuance and reduce time-to-credential; guarantee fair access for SMEs and low-income participants.

5.4 Paid training leave and cost supports for farmers, micro-holdings, and SMEs

Involved actors: Legislators; employers; trade unions; public employment services; mutual funds.

Recommended actions: Establish paid training leave with seasonal windows and substitution during peak periods. Add vouchers/per diems for the self-employed and micro-holdings to cover fees, travel, replacement labour, and care. Link preferential support to accredited offers or credential issuance.

Functions: Remove time and cost barriers; set simple eligibility and basic anti-fraud controls; offer a single access portal with standard forms; publish take-up data and reasons for non-participation; adjust parameters when gaps by actor or territory appear.

Objectives: Raise participation among farmers and micro-entities; ensure real access to paid time for learning; offset indirect costs with simple supports; reduce the share without compensation; make usage transparent and adjustable.

5.5 Blended sector finance with outcome-linked eligibility and lower volatility

Involved actors: Ministries of Labour, Agriculture, Education, and Finance; the joint committee; EU/national fund managers.

Recommended actions: Keep the public backbone (EU and national/regional funds) and add a transparent sector fund by agreement (consortia or light levies, with micro-exemptions). Reserve resources for social-partner capacity and provider quality upgrades.

Functions: Tie a share of funding to outcomes (completions and credentials, not just enrolments); open rolling micro-grant windows; sign multi-year framework agreements for core provision; publish funding dashboards; apply audits and claw-backs for misreporting; recognise mobile and on-farm delivery with standard cost models.

Objectives: Stabilise funding across cycles; align money with results, not enrolments; cut stop—start volatility; build partner capacity and raise provider quality; improve transparency and comparability of costs.

5.6 Pact for Skills contact point embedded in the joint committee

Involved actors: Ministry coordinating the Pact; the joint committee; Pact networks; cooperatives; provider associations.

Recommended actions: Create a national Pact contact point inside the committee to coordinate the system: map provision and partnerships; broker agreements; publish an Annual Agriculture Skills Plan with priorities, credential standards, and funding rules; align national eligibility with Pact priorities while keeping national autonomy.

Functions: Raise Pact awareness and participation; run peer learning; host repositories of curricula and assessment tools; disseminate information on rights, funding, and credential pathways through employer and union channels; track usefulness and coordination quality with simple indicators and external feedback.

Objectives: Turn the Pact into a system coordinator; publish one annual skills plan; expand and stabilise partnerships; avoid duplication via shared resources; measure coordination quality and impact.

5.7 Quarterly KPI dashboard with standard definitions and governance triggers

Involved actors: The joint committee; national statistics/VET units; providers; employers; unions.

Recommended actions: Add a public quarterly dashboard with four core KPIs: participation rate, hours per participant, completion rate, and credentials issued. Publish definitions, validation rules, treatment of missing data and delays, and minimum disaggregation by actor type and holding size.

Functions: Enable short-cycle management in a seasonal sector; show distributional views (e.g., farmers vs. employees) and optional context metrics (paid leave, compensation, funding mix); set thresholds that trigger improvement clauses in agreements or contracts; record corrective actions; commission periodic independent reviews to ensure proportionality, confidentiality, and consistent use.

Objectives: Move from annual-only to operational monitoring; standardise metrics and methods; track equity through minimum disaggregation; trigger timely corrective action; ensure data quality with regular independent review.

6. Conclusions

Sectoral social dialogue remains the most credible governance spine for scaling lifelong learning in European agriculture, yet its enabling conditions are uneven. National architectures differ in density and mandate: while ministries of labour and economic-social councils are common interlocutors, recognition, implementation, and enforceability of agreements do not form a consistent baseline. Delegation of powers to social partners concentrates in Mediterranean and Eastern Europe, and public support is heterogeneous, with reliance on EU and national funds and gaps where no support is reported. Obstacles cluster around political will, scarce resources, fragmented actor landscapes, and weak consultation frameworks, confirming that legitimacy and traction depend on closing governance gaps. On the training side, coverage is present and formats are balanced across online, face-to-face, and on-the-job modalities, but the dominance of informal learning limits portability when recognition pathways are absent. Skills needs coalesce around digitalisation, technology adoption, OSH, sustainability, climate adaptation, and farm-level management and regulatory competencies. Incentives lean on symbolic recognition rather than time and money; farmers are especially exposed to opportunity-cost barriers. Monitoring is largely annual, which slows operational learning in a seasonal environment.

The recommendations address these frictions with established European instruments rather than new inventions. First, sectoral joint committees with a minimum statutory mandate act as the operating system: they anticipate needs, programme annual provision with seasonal windows, set quality standards, and evaluate completions and credentials with distributional lenses. Second, baseline collective-bargaining clauses make rights actionable by fixing three floors needs assessment, paid training leave, and recognition—so that time and credentials are routine entitlements rather than discretionary benefits. Third, a credential pathway connects flexible delivery to value through micro-credentials aligned with occupational standards, recognition of prior learning, and stackable credit accumulation toward full awards. Fourth, targeted incentives remove binding constraints: paid learning time with seasonal flexibility and vouchers or per diems for the self-employed and micro-holdings to offset direct and indirect costs. Fifth, finance is stabilised through a blended model that preserves the public backbone and adds a transparent sectoral fund governed by social partners, with a defined share of eligibility linked to outcomes—completions and credentials issued—rather than enrolments alone. Sixth, a national Pact for Skills contact point embedded in the joint committee turns the Pact into a coordinator by mapping provision, brokering partnerships, publishing an annual agriculture skills plan, and aligning standards and funding criteria. Finally, a quarterly KPI dashboard—tracking participation, hours per participant, completion, and credentials issued, with standard definitions and minimum disaggregation—adds short-cycle management to annual equity and impact reviews.

Methodologically, the synthesis is conservative: two finite, non-probability universes are read in parallel, respondent pools do not overlap across waves, and no record-level linkage is attempted; claims are descriptive within each wave, not causal nor cross-wave statistical contrasts. Even under these constraints, the convergence of institutional, incentive, finance, and

monitoring signals is strong enough to ground practical reform. The strategic task is to apply Europe's familiar toolkit—social dialogue, collective bargaining, recognised credentials, cofunding, and disciplined monitoring—with greater regularity and transparency to agricultural constraints such as seasonality, small holdings, and dispersion. Done consistently, the sector can move from episodic initiatives to a coherent, rules-based, and future-oriented skills regime that delivers higher participation, more completions with recognised credentials, and fairer access across actors and territories

7. References

CEDEFOP. (2020). Vocational education and training in Europe, 1995–2035: Scenarios for European vocational education and training in the 21st century. Publications Office of the European Union. https://doi.org/10.2801/08824

CEDEFOP. (2022). Governance of vocational education and training: The role of social partners. Publications Office of the European Union. https://www.cedefop.europa.eu

CEDEFOP. (2023). *The future of vocational education and training in Europe: Synthesis report.* Publications Office of the European Union. https://www.cedefop.europa.eu/files/3094_en.pdf

CEMA – European Agricultural Machinery. (2022). *The Pact for Skills: Launch of a skills partnership for the agri-food ecosystem*. https://www.cema-agri.org/images/publications/press_releases/Proposal-The_Pact_for_Skills-Launch of a Skills Partnership for the Agri-food Ecosystem.pdf

Council of the European Union. (2020). Osnabrück Declaration on vocational education and training as an enabler of recovery and transitions to digital and green economies. Council of the European Union. https://www.cedefop.europa.eu

European Commission. (2020). *European Skills Agenda for sustainable competitiveness, social fairness and resilience*. European Commission. https://ec.europa.eu/social/BlobServlet?docId=22832&langId=en

European Commission. (2021a). *European Green Deal*. Publications Office of the European Union. https://op.europa.eu

European Commission. (2021b). *European Pillar of Social Rights Action Plan*. Publications Office of the European Union. https://op.europa.eu

European Commission. (2025). *Pact for Skills* — *Agri-food ecosystem* (official portal). https://pact-for-skills.ec.europa.eu/about/industrial-ecosystems-and-partnerships/agri-food_en

International Labour Organization. (2023). *Global Employment Trends for Youth 2023: Investing in transforming futures for young people*. International Labour Office. https://www.ilo.org

International Labour Organization. (2024). Comparing vocational education and training qualifications: European experiences.

https://www.skillsforemployment.org/sites/default/files/2024-01/3090_en.pdf