One of the tasks in the FIELDS project is the development of a European Strategy for skills enhancement in the agriculture, food industry and forestry sectors (Deliverables 2.3). On the one hand the EU strategy includes key aspects and general guidelines that will be further completed by roadmaps at a national level. On the other hand the aim is to provide input for the Agri-food Pact for Skills. This strategy is in line with the European Skills Agenda of the European Committee.

In this document we develop 6 key strategy statements.
Training needs

Trend and scenario study

In the Erasmus+ FIELDS project key trends in the areas of digitalisation, sustainable production, bio-based production and business models have been identified. However, trends are continuously evolving, making a solid prediction of the future agri-food and forestry sectors extremely hard. Therefore, we designed three scenarios: the High Tech Path scenario (where the focus of the system’s stakeholders is on technology solutions for the current challenges), the Sustainable Path scenario (where the focus is on solutions through sustainable production systems), and the Established Path scenario (where current approaches to cope with the challenges are pursued). Given recent high impact events, Covid-19, the energy crisis and the Ukraine war, we concluded that solutions are to be found in a combination of high-tech and sustainable production, with a key requirement for affordable food for the European population.

Skill needs and training offer

One finding of the trend analysis were the huge inter-country differences that are dependent on key characteristics such as digital infrastructure, production system, farm/company structure, industry developments, level of education, etc., implying different skill needs. In the same way different scenarios imply different needs, according to level of digitalisation and sustainability of the production system, specific business models, supply chain relationships, the role of the private sector and private investments in VET, the direction of education and training policies, etc.

In the extensive skill needs analyses in the FIELDS multi-country focus group study and survey, a remarkable finding was the top priority of management skills: business planning, strategic management, everyday usage of digital technology and others, next to the demand for (new) technical skills in digitalisation, sustainability and bio-based production. Linked to management and business skills, the importance of soft skills was underlined. Corresponding with earlier observations, Covid-19 is considered a booster for digitalisation related skills. The Ukraine war and energy crisis enforced the requirements for skills related to the use of renewable energy, and skills related to resilience and risk management. The CAP 2023 additions reflect increased demands for sustainable production skills.

In general the European education and training system follows these trends, but implementation of changes is lagging behind. Nevertheless, more attention is given to technological change, green energy, entrepreneurship, innovation skills. And, there is the tendency of digitalization of learning, shorter training formats, more attention to lifelong learning (LLL) and development of micro-credentials.

Strategy statement: Training needs

The focus of training programs should move to skill needs as measured in the FIELDS project and related projects. As skill needs in the agri-food and forestry sectors are continuously evolving, training programs should be flexible and easily adaptable to latest trends. Future needs move in the direction of skills for sustainable production, high-tech skills (for sustainable production and the production of affordable food), and management/entrepreneurship and soft skills to cope with a dynamic and interlinked business environment. Within these frameworks, specific requirements for the different countries and regions can be formulated.
Regulatory system and funding

Our study pointed at three groups of challenges in the regulatory system: structural challenges, challenges in stakeholder relationships and policy challenges.

**Strategy statement: Regulations**

**Structure**: at EU level harmonization of skills, qualifications and job profiles is of great importance. At the same time flexibility of EU level systems should be enhanced, due to the dynamics in supply and demand of skills. Overall, across countries, there should be a focus on decreasing complexity and rigidity of current VET systems, transparency should be increased, attention to modular lifelong learning systems and the development of micro-credentials should be increased.

**Stakeholder involvement**: the move towards multi-stakeholder involvement including private sector engagement in the design, planning and implementation of VET systems must be (further) enforced.

**Policies**: country level skill strategies, including a lifelong learning approach, should be developed and maintained in all EU countries. Harmonization of the education and training system across countries (e.g. to enable mobility of students and employees throughout Europe) should be a key objective [1].

Regarding the challenges in the funding system, shortcomings are not so much in the quantity of funding, but in new content to be funded, in line with changing skill needs, and to better support the functioning and development of the VET system. Moreover, accessibility of the funding system must be improved.

**Strategy statement: Funding**

**Content**: the funding system needs to match better with current and evolving skill needs (sustainability, digitalisation, bio-based production, management/entrepreneurship and soft skills).

**Support and development of the VET system**: more permanent funding instead of project funding, more funding for EU collaboration efforts (e.g. Pact for Skills), to enhance flexibility of education, to enhance inclusion and equality, funding for workplace-based learning, and funding for the VET infrastructure

**Accessibility**: the accessibility of the funding system for multiple stakeholders needs to be improved through more transparency of the funding system, better communication, and guidance of applicants

[1] Harmonization does not mean that country and region level VET systems should have similar (program) structures, organization/governance and policies. A common European catalogue and repository of accessible training courses/programs together with a system of micro-credentials, and a harmonized certification system for courses and VET providers could support mobility of learners and employees throughout Europe.
Key elements and prerequisites for future VET programs

In our studies key elements and prerequisites for agri-food and forestry VET programs were identified.

4 Strategy statement: Key elements and prerequisites for future VET programs

- attention to lifelong learning should be further enforced. There is the tendency that boundaries between IVET and CVET are increasingly blurring. Development of Micro-credentials is key.
- in training of management/entrepreneurship and soft/transversal skills, besides to general business planning and management skills, key attention should be given to relational skills.
- working practices and work-based training are essential for most training programs. This in particular holds for the more technical skills, although typical skills to communicate and collaborate with other business functions also do need practical experience and guidance by company mentors.
- in the design of new courses an optimal balance between online education (e.g. flipped classroom), face-to-face education, and in-company practice should be strived for.
- besides the necessity to improve internet access and access to computer equipment across Europe basic digitalisation training courses should be developed throughout Europe. Training materials should suit a diverse EU population (language, culture, education level, urban-rural).
- under-privileged groups, low-income workers and migrants need financial support and advice to access training.
- gender issues should be pre-assessed, in particular in training for tasks that are considered “masculine” or ‘feminine”, and in soft skills modules. Special attention must be paid to women job returnees (upskilling)
- in the design of modules and courses, specific attention should be paid to 1. timing (align the course schedule to the trainee’s availability), 2. structure (the aim is learning for practice), 3. communication (on the benefits for the trainee), 4 funding (to enable participation financially).
- the training offer will be different according to specific characteristics and requirements of countries and regions. Standardization of training modules across Europe is difficult, however, standardisation possibilities can be investigated on the level of “basic” modules.

Governance functions in the future VET eco-system

In this section we first investigate the governance rationale of the European skills ecosystem by referring to the well-established concepts of Exploitation and Exploration. Exploration of an organisation refers to redefining or adding new objectives, finding new pathways and business processes, creating or tapping into new resources. Exploitation is making efficient and effective use of the resources at hand to reach the organisation’s objectives.
Strategy statement 5: Key governance functions in the European VET eco-system

EU-level key functions: exploration and high level exploitation
- Coordination of EU level VET organisations and networking for strategic partnerships between multiple stakeholders at EU level. Support of policy making efforts
- EU level coordination of exchange of best practices and tools
- Pact for skills development, support of national skills strategies and set up of expertise centres across Europe
- Coordination of VET supply and demand monitoring efforts, making high level inter-country comparisons and EU policy impact analyses

Country-level key functions: exploration and exploitation at VET implementation level
- Networking for partnership building and VET implementation at country and regional level
- Exchange and (joint) implementation of best practices and tools at national and regional level
- Setting up national and regional multi-stakeholder partnerships (between VET and supply chain partners)
- Monitoring the performance and effectiveness of the VET system, focusing on supply and demand of skills and national/regional policy impact assessment.

Strategy statement 6: Monitoring in the European VET ecosystem

Because of the diversity in the agri-food and forestry skills ecosystem across countries and the rather scattered and incomplete monitoring initiatives, support of design and harmonization of agri-food and forestry monitoring systems is an important task at EU level. Key performance indicators (KPIs) can be used for monitoring progress and outcomes and to take decisions on the way to go forward. However, a system of KPIs should be limited in complexity, and be transparent and user-friendly. At European level, monitoring of the agri-food and forestry skills ecosystem should be based on a limited number of key performance indicators, to assess general trends in the demand and supply of skills and general policy impacts. At country level, monitoring focuses on these areas of the skills ecosystem and these indicators where national and regional policies are meant to have an impact.

The European Strategy report of the Fields project can be used as input for the discussions on the tasks, activities and organisation of the Agri-food Pact for Skills, as well as for discussions with multiple EU and National level stakeholders on the future of the European VET ecosystem.