EDUCATING THE NEXT GENERATION OF PROFESSIONALS IN THE AGRI-FOOD SYSTEM

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Objectives of the Project and Work Package 4 - Policy Assessment and Recommendation

This policy brief presents some of the main policy insights resulting from the Work Package 4 (WP4) of the NextFOOD Project. The objective of the NextFOOD Project is to drive the transition to more sustainable and competitive agri-food and forestry (AFF) systems development by designing and implementing education and training (ET) systems. The Project challenges the linear view of knowledge transfer as a top-down process from research to advice and practice, and supports the transition to more learner-centric, participatory, action-based and action-oriented education and learning in agri-food and forestry systems.

WP4 of the Project aimed to assess the current educational policies in the AFF sectors and to suggest new strategies and policy instruments on regional, national as well as the EU-level that support the transition towards action-, and practice-oriented learning methods.

Activities Performed

The WP4 started with a diagnostic of the existing policy framework of the education and training systems AFF sectors aimed at identifying the main policy gaps. This was done through an online survey collecting input from 188 participants, including researchers, teachers, experts, farmers, advisors and policy-makers.

The diagnostics of the main gaps has been then followed by identification of strategies for improvement through a round of 10 country/regional workshops, followed by an EU level workshop. A total of 80 participants from 12 different countries took part in these workshops. The workshops were designed based on the AKIS conceptual model and the Farm to Fork strategy (FtF) objectives.

Finally, based on the above and enriched through extensive desk-research, concrete guidelines and specific policy recommendations and design options for policy-makers were developed. Specific attention has been devoted to take into account the policy objectives set out by the recent EU strategies and policies, namely the Green Deal, the Farm to Fork strategy and the new CAP.

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Main Gaps Identified

The main policy gaps identified are the following:

- Absent or insufficient coordination among different policy fields (Pre-University, University, Adult learning and Vocational Education, and Training measures in agri-food) and actors (e.g. University and industry) across the national, regional and EU-levels: 84% of survey participants believe that coordination among the four policy fields is "Poor".
- Insufficient amount of financial support especially for adult learning and vocational education of young agri-food and forestry professionals: 60% of survey participants believe that financial support provided is not sufficient.
- Policies are not effective in promoting action-oriented/experiential learning to tackle the real-life problems: 18,5% of survey participants responded "not at all" to policies being effective, while 39% answered they are effective "to some extent"; pre-University education is the educational level where policies are regarded to be the least effective.
- Policies are not effective in providing innovative ways of learning (student-centered learning, interdisciplinarity, internalisation, mobility, networking): the effects of policies are rated as "very negative" across different areas, such as internalisation (13,5%), student-centered learning (10%), networking (8,4%), Life-long learning (8%).
- Policies are not effective in promoting sustainability, entrepreneurship and innovation: the biggest missing areas were innovative learning methods, networking, sustainability.
- Policies are not effective in addressing agricultural and forestry sectors' real needs: the majority of survey respondents believe that the current policies meet the needs of the sector only "to some extent".

Main Implications for Policy

Education is one of the most powerful and proven vehicles for sustainable development, as also stated as part of the Sustainable Development Goals (SDGs). "Quality education" is one of the 17 SDGs, which aims to ensure inclusive and equitable quality education and promote life-long learning opportunities for all. Meanwhile, the AFF sectors are nowadays rapidly evolving, thus the AFF professionals need to have access to innovative education systems which can provide them with the capacities to drive the transition to a sustainable and resilient AFF sectors, and also to deal with a multitude of challenges such as climate change and resource scarcity. In order to enable this transition, education policies should focus on the following main areas:

IMPROVING AND UPDATING OF THE CURRICULA AND LEARNING PROGRAMMES

Introducing programmes that integrate formal, non-formal and informal learning

- Balancing theory and practice in learning, by allowing students to put into practice the knowledge acquired within formal education;
- incentivizing private businesses to cooperate with schools also lifting bureaucratic and financial burden that sometimes penalizes who accept trainees;
- incentivising internships and field trips using the NextFOOD approach that can allow interactions between students and workers;
- putting in place an integrated qualification framework, enabling students to have experiences outside the University with Associations, Foundations or NGOs;
- establishing (a network of) national centres for curriculum design and personnel development, which would allow a national coordination of different practices among national universities.

Integrating soft skills into the curricula (starting from early ages).

- Soft skills, such as critical and system thinking, communication, entrepreneurship, marketing, holistic knowledge, digital and technological skills, motivation and consciousness, teamworking, interpersonal skills, and communication and networking are critical skills and competencies that need to be acquired more widely by the students.

Introducing and extending courses to improve digital skills and digital literacy of students of all levels.

Obtaining digital skills are important for farmers (or future farmers) to be able to use new and advanced technologies and digital learning platforms. Besides, it provides an opportunity for students (and farmers) in remote or disadvantaged areas to reach (digital) learning activities.

ENHANCING COLLABORATION AND MULTI-ACTOR APPROACHES

A greater collaboration among actors/bodies.

Collaboration between school and business, and more in general between educational bodies and industry, is necessary to initiate a virtuous circle that will improve education. This will also ameliorate the service/expertise provision to enterprises and, through their needs' identification would continue to foster programme design with the requirements for skills update. This can be achieved through:

- closer collaboration between educational bodies and industry to balance theory and practice;
- joint efforts to develop work placement and applied projects;
- engage and interact with the outside world;
- broader competence through collaboration and mixing competencies, also with an international view.

Inclusion of stakeholders into curriculum-making (and decision-making) processes.

Inclusion of farmers, food system entrepreneurs, NGOs, associations, industry, enterprises and the third sector in curriculum-making is critical. Besides, education provided directly from farmers can inspire, engage and educate young people and give practical understanding of the crucial role that agriculture plays.

Provide incentives to collaboration between actors.

To enhance collaboration, it is important to incentivize multi-stakeholder approaches adopted among different ministries or bodies, as well as public and private actors.

REVISING THE EDUCATIONAL CONTENT AND APPROACH

Making sustainability an integral part of education and training.

Sustainability needs to be considered as a fundamental pillar for education. If subjects such as nutrition, sustainability and environmental awareness are to be introduced in the curricula, it is crucial that schools also adopt consistent practices that would serve this goal.

Integrating gender into the whole educational system and making it an integral part of the whole sector.

In order to make gender-neutrality an integral part of the whole value chain - and not only a topic to consider separately - the whole approach of the sector needs to be changed as a system, starting from primary education onwards. Towards this direction, it is important to:

- enhance digital skills to close the gender gap, by empowering women entrepreneurs;
- adopt distance learning approaches, and introducing distance learning programmes at formal institutions;
- introduce more flexible learning approaches, rather than rigid programmes with prerequisites, fixed semesters, limited or no work placement during the programmes as a way forward.

Promoting approaches to Lifelong Learning that are flexible, short, digital, and free.

It is of crucial importance to design a lifelong learning approach that is accessible to all, including: students that would like to change path, professionals working in the AFF sectors, adults that would like to keep updated with the sector or those that would like to change careers and occupation in midlife and teachers or educators who would like to be equipped to teach new skills and competencies.

- **CHANGING THE APPROACH OF POLICY-MAKING**
  - **Harmonization of policies across all education levels.**
    This can act as an important step to allow collaboration and coordination among actors, different educational levels, and across the EU.
  - **Simplification of administrative procedures and allowing for a better coordination of policies.**
    Policies need to be designed in a collaborative way that produce synergy and reduce conflicts. Indeed, there is a need of a simplification of bureaucracy in the ET system, which is currently standing in the way of adapting quickly to the needs of the sector. Besides, harmonization of policies across the EU is needed to obtain a more systematic and integrated policy.
  - **Revising the role of education in the AKIS framework.**
    The results of this study also revealed that AKIS framework currently is regarded more as a list of actors rather than as a system to be internalized and owned by its own actors, hence some changes are required, such as:
    - making it less static to capture the process of change in the sector;
    - giving more emphasis to students and farmers as not only "needers" of knowledge but also as "creators" of knowledge, this means making the AKIS framework less linear and more leaning towards knowledge sharing;
    - to reinforce the role of advisory services and rethink the role of advisors, making them more central in AKIS, support their training and reconnect them to tackle current challenges.

Conclusions

A good quality educational policy in this sector and the need to enhance networking, collaboration, sustainability, entrepreneurship and innovative learning methods came out as the most important needs of the sector. These results emphasize that to make a transition of the ET systems towards achieving the Green Deal, Farm to Fork and new CAP objectives, the development of policies that support initiatives for student-centered and interdisciplinary education, that is flexible, non-traditional and supported by non-formal and life-long learning approaches, is needed. Hence, this work provides a background for proposing new policy instruments and concrete policy tools for the future challenges in the AFF sector, where an urgent change of pace and approach in ET is necessary for all the value chain, from the farm to the fork.

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