Inclusive REskilling and upSkilling Toward competitive Agrifood and veterinary sector: European agenda Strategy

WP 6.1

Regulatory Framework

Midterm Report

Table of Contents

Table of figures

1. Introduction

The I-RESTART project focuses on reskilling and upskilling workers in the agri-food and veterinary sectors, particularly by retraining those transitioning from heavy industry. The project promotes inter-sectoral and intergenerational skills transfer through innovative micro-credentials and work-based learning, offering flexible, inclusive training led by mentors. The final goal is to create roadmaps and strategies to address skill gaps across Europe.

Coordinated by CONFIAGRI, work package 6 (WP 6) has focused on ensuring the long-term sustainability of the project's strategy and training materials (Long Term Action Plan), the curricula uptake by external vocational education and training (VET) providers, and the development of national roadmaps. Key actions have included the provision of national and EU regulatory frameworks for training and innovation opportunities; the provision of national and EU funding opportunities; the design of sustainability plan and future use of the platform, with project results exploitation; and a plan for future engagement of the stakeholders. First, the regulatory framework is studied to make sure that the strategy can be implemented locally. Then, funding opportunities for its implementation and sustainability is monitored by the consortium and a governance body is created to make sure the outputs remain available. Finally, a first round of engagement is sought through the partners' network and the signature of Memorandum of Understanding to create a Strategy Sector Alliance among 30 more partners before project conclusion.

In this regard, this work package integrates outputs from both the previous FIELDS Blueprint and the I-RESTART project, creating a centralized resource hub for future users. The Memorandum of Understanding is expanded, with at least 30 partners from the I-RESTART network signing on and with collaboration with the Pact for Skills. This initiative seeks to achieve a Sector Skill Alliance to address skills challenges by offering modular training tailored to the needs of the agri-food and veterinary sectors, supporting worker mobility.

This report focuses in WP 6.1, local and national regulatory frameworks, which compile existing legislation related to training and other relevant laws that impact the project's key focus areas: sustainability and bio-economy, digitalization, business and entrepreneurship, soft skills, one-health and emerging trends.

2. Local and National Regulatory Framework

The Local and National Regulatory Framework has been prepared to facilitate the roll-out of project deliverables at national and regional levels with the relevant governmental and sectoral authorities. Partners have provided information on the existing regulatory frameworks in each country and region for I-RESTART (Table 1), complementing those in FIELDS:

Table 1. I-RESTART Regulatory Framework – partners' contributions

FG nº	Partners	Provide regulatory framework of the following countries:
1	LVA	Austria
2	UHOH	Germany
3	SEVT	Greece
4	CONFAGRI	Italy
5	AERES	Netherlands
6	Confagri PT	Portugal
7	FIAB, SCOOP	Spain
8	GZS-ZKZP	Slovenia
9	AARHUS	Denmark
A general monitoring will be done at EU level by FDE, ACEEU, EBVS, ISEKI		

3. Deliverable Regulatory Framework

The Regulatory Framework deliverable intends to collect existing information on specific legislation for training, as well as other legislation that is considered relevant to the main areas of impact of the project (sustainability and bio-economy, digitalization, business and entrepreneurship, soft skills, one-health and emerging trends), considering the foreseeable future needs for skills in these areas.

The initial capturing of information has been done in an Excel template provided by ACEEU and stored in the Google Drive, following the same structure of the platform. This collection has been done through a table that includes 13 columns for collecting basic information (in the platform), related with the specific regulation for training:

1. **Organisation:** The partner that fills out the fields
2. **Document Reference:** the name of the regulation in its native language
3. **Doc_Type:** Document type, for example, EU law (treaties, legal acts, consolidated texts, international agreements, preparatory documents, summaries of EU legislation), EU case-law (case law, digital reports), national law or regulation etc.
4. **Framework:** Theme of the regulation (Training / Bioeconomy / Sustainability / Digitalisation)
5. **Country:** Which country or geographic area the information refers to
6. **Key words:** such as food industry, animal production, veterinary, digitalisation, sustainability and bioeconomy, business and entrepreneurship, soft skills, one-health, etc.
7. **Date:** date of the publication of the document
8. **Summary:** synthesis of the regulation
9. **Application:** National, Regional, EU or other
10. **Entry force:** date of the documents' entry into force
11. **Language:** language available of the document (English and/or others)
12. **Link:** link to the document
13. **Comments:** further observations

4. Results

The key highlights of the project results are presented below.

4.1. Analysis of partners' contribution

Table 2. I-RESTART Partners' contribution

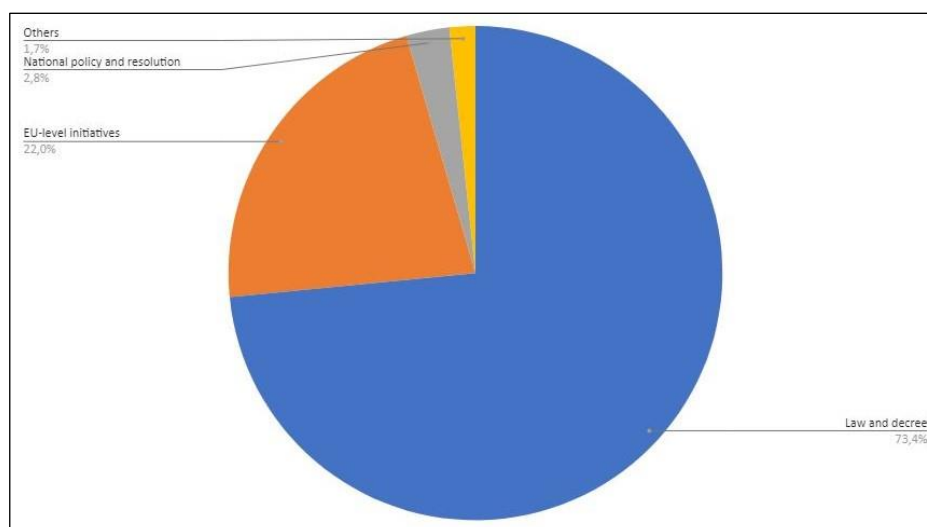| Partner		Scope	Entries
Confederazione Generale dell'Agricoltura Italiana	CONF	Italy	55
Aarhus University	AU	Denmark	15
Austria Food Research Institute	LVA	Austria	12
Europäische Gesellschaft für Integration der Lebensmittelwissenschaft und -technologie in der Lebensmittelversorgungskette	ISEKI	EU-level	11
Food and Drink Europe	FDE	EU-level	11
Universität Hohenheim	UHOH	Germany	10
Greek Food and Beverage Industry	SEVT	Greece	10
Chamber of Commerce and Industry of Slovenia	GZS	Slovenia	10
Confederação Nacional das Cooperativas Agrícolas e do Crédito Agrícola de Portugal	CONFAGRI PT	Portugal	10
Cooperativas Agro Alimentarias De Espana U De Coop Sociedad Cooperativa and Federación Española de Industrias de Alimentación y Bebida	SCOOP & FIAB	Spain	9
Accreditation Council for Entrepreneurial and Engaged Universities	ACEEU	EU-level	8
Stichting AERES Groep	AERES	The Netherlands	6
European Board of Veterinary Specialization	EBVS	EU-level	11
		TOTAL	178

4.2. Analysis of document types

The regulatory framework a set of regulations and guidelines in the form of laws, policies, regulations and initiatives covering the regional, national and international scope. The analysis reviewed a total of 178 documents types, categorized into four main clusters, as shown in Figure1.

The Law and Decree cluster is the largest, comprising 130 documents, which represent 78.3% of all reviewed documents in the I-RESTART database. This cluster includes various types of legislation and regulations such as National law, Decree law, Regional law, Regional decree, State law, and National regulation.

European-Level initiatives form the second cluster, consisting of 28 documents, which account for 16.9% of the total reviewed documents. This cluster includes EU Regulation, European Commission Strategy, Action Plan, Communication, Decision, as well as European Parliament Communication, Regulation, Proposal, and Working Document.

Figure1. Type of documents in the regulatory framework

The next cluster is National Resolution and Policy, which includes 5 documents, making up 3% of the total document types that were reviewed. This cluster consists of National Policy documents and National Resolutions.
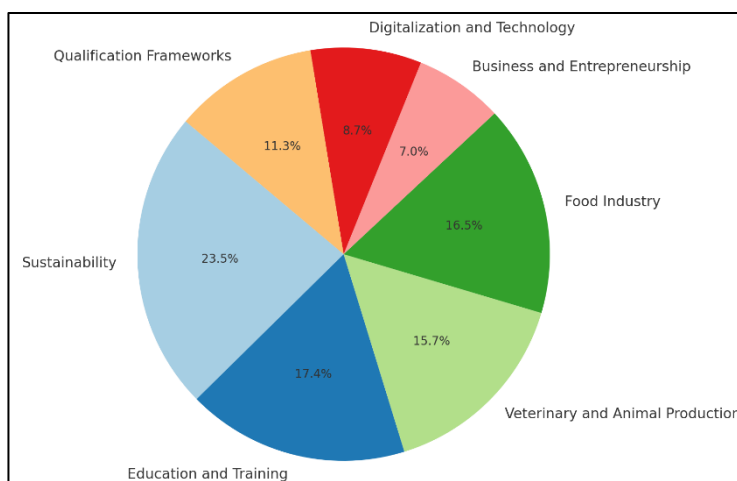
The final cluster, categorized as "Others", contains 3 documents, representing 1.8% of the total document types. This category includes documents such as International Norms, Policy Briefs, and HACCP guidelines.

The document types reviewed were heavily skewed towards laws and decrees, suggesting it is a main regulatory instrument to drive changes in the agri-food sector. European-level initiatives also show a significant presence, indicating some importance in the context of EU regulations. The presence of other various document types such as resolutions, policies, briefs, and norms indicate diversity of regulatory framework documents in different national contexts.

4.3.   Analysis of documents reviewed

The documents reviewed are grouped into seven clusters, as shown in Figure 2. The cluster represent broad areas of focus, such as sustainability, education and training, veterinary and animal production, food industry, business and entrepreneurship, digitalization and technology, and qualification frameworks.

Figure 2. Topics of the documents.

- Sustainability: This cluster represents most of the frameworks reviewed by the partners (23.5%). This cluster broadly includes themes related to environmental sustainability, sustainable practices in agriculture and food production, bio-economy, training and related areas.

- Education and Training: Themes related to vocational training (VET), labour market training, adult education, non-formal and informal learning, education guide, and specific skills were grouped into this cluster.

- Veterinary and animal production: This cluster includes themes focusing on veterinary practices, animal health, livestock management, and related areas of animal production.

- Food industry: This category encompasses themes related to various aspects of the food industry, including food safety, food supply chains, and agricultural practices.

- Business and entrepreneurship: Themes related to agri-business, business practices, entrepreneurship, and investments within the food industry and agricultural sectors were grouped in this cluster.

- Digitalization and technology: This cluster includes themes related to digitalization, technological advancements, and their integration with other sectors like sustainability, animal production, and training.

- Qualification frameworks: This cluster include themes related to VET frameworks, and framework for the development of food and feed legislation both at Union and national levels.
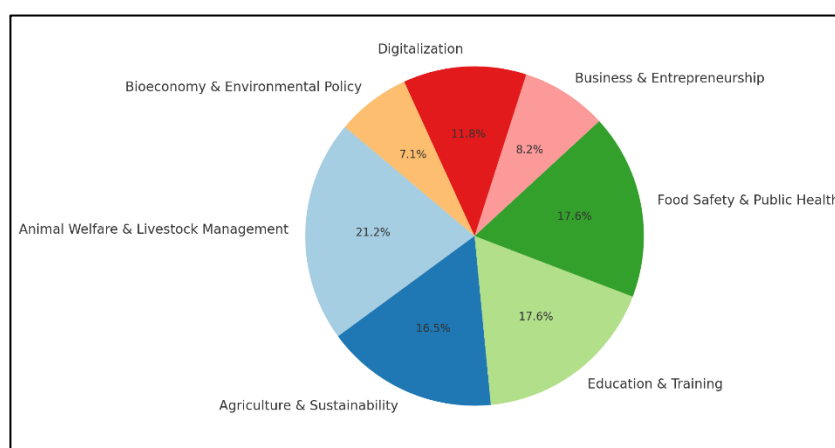
While the themes have been categorized into distinct clusters, it is important to acknowledge the strong interconnectedness among the themes. The interconnectedness of the clusters reveal that they are not operationalised in isolation. For example, the data shows that sustainable practices (Sustainability & One Health) are intertwined with education, business strategies, and technological innovations. Similarly, topics related to Agriculture were not confined to a single cluster; they appear across multiple areas, including Business (e.g., agri-business and entrepreneurship), Food Industry (e.g., food safety and supply chains), and Veterinary and Animal Production (e.g., livestock management and veterinary health). The interconnectedness highlights the complexity

and interdependency of modern challenges and solutions, necessitating the need for a holistic approach where education, policy, business, and sustainability are integrated to achieve future-oriented and responsible agricultural practices. For example, advancing sustainability in agriculture requires not only environmentally sound practices but also training programs, digital innovations, veterinary care, and supportive business environments. These overlapping areas show that improvements in one sector often have ripple effects across others.

4.4. Analysis of keywords

The focus of the regulations is also analysed through the main keywords found in the documents, as shown in Figure 3.

Figure 3. Main focus areas by keywords.

- Animal welfare and livestock management: This cluster represents 21.2% of the keywords and phrases analysed. Key phrases categorized in this cluster include animal breeding, livestock facilities, animal wellness, veterinary activities, animal welfare, emission reduction, animal production, bio-economy development provision, animal health law, and biodiversity in animal husbandry.

- Agriculture and sustainability: Representing 16.5% of the keywords and phrases used in the data collection, this cluster includes phrases such as future farming, agricultural policy, sustainable practices, one health sustainability, Common Agricultural Policy (CAP), food system, animal welfare standards, circular economy, organic farming, organic production, biodiversity, ecosystems restoration, sustainable agriculture, rural development, climate neutrality, emission reduction, and green transition.

- Education and training: Accounting for 17.6% of the keywords and phrased of the data reviewed, this section highlights the importance of vocational training, education, and skills development. This cluster includes key phrases such as vocational training, apprenticeship, master craftsman, curriculum, agricultural colleges, fruit, plant and vegetable growing, certification, personnel recognition, innovation
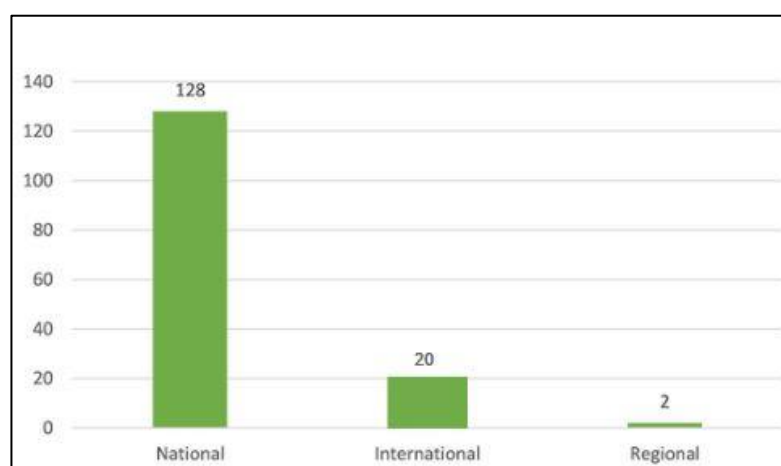
in VET, non-formal, informal learning, adult education, labour market training, digital education, skills development, and lifelong learning.

- Food safety and public health: This cluster represents 17.6% of the keywords and phrases analysed. The cluster includes phrases such as food, public health, food traceability, food additives, food technology, veterinary medicines, food safety, official controls, risk assessment, food transparency, sustainability, risk assessment in the food chain, food industry, and food waste.

- Business and entrepreneurship: Accounting for 8.2% of the keywords and phrases in the dataset, this cluster encompasses terms such as business and entrepreneurship, investments for growth and jobs, competitiveness of enterprises, digitalization, agri-business, innovation networks, and investments.

- Digitalization: This cluster, amounting to 11.8% of the keywords and phrases in the data collection, encompasses terms such as digitalisation, digital literacy, emerging skills, digital skills, digital education, technology, research, innovation, technology, sustainability, and digitalization in agriculture.

- Bio-economy and environmental policy: This cluster represents 7.1% of the keywords in the collection. Key phrases in this cluster include: sustainability and bio-economy, renewable resources, energy, climate, food safety, environment, and circular economy.

4.5. Analysis of I-RESTART Applications

The scope of the reviewed regulatory frameworks from the regional, national and international perspectives is analysed as shown in Figure 4:

Figure 4. Scope of regulations

- Regional: This category represents the narrowest scope of application, with only two regulatory frameworks identified as applicable within the Burgenland region in Austria. For example, the LGBl.Nr. 5/1999 issues by the Provincial Government of Burgenland outlines regulations concerning the

curriculum of agricultural schools in the region.

- National: As shown in the graphical illustration below, 128 frameworks are applicable in various national contexts, including Greece, Austria, Denmark, Spain, Germany, the Netherlands, Portugal, and Slovenia. For instance, the Italian Legislative Decree No. 196/2003 serves as a National Law within Italy's legislative framework.

- International: Frameworks in this category are application at the EU-level and beyond a single national context. Examples include the ISO 21-001:2018 from the International Organization for Standardization and the Regulation (Document 32021R0690) from European Parliament and Council of the European Union.

5. Conclusion

The I-RESTART project focuses on reskilling and upskilling workers in the agri-food and veterinary sectors, particularly those transitioning from heavy industry. The project emphasizes inter-sectoral and intergenerational skills transfer through innovative micro-credentials and work-based learning.

Work Package 6 (WP 6) plays a crucial role by ensuring the long-term sustainability of training strategies, aligning them with local and EU regulatory frameworks, and securing funding opportunities. WP 6 integrates outputs from both the FIELDS Blueprint and the I-RESTART project to create a centralized resource hub for future users.

The regulatory framework analysis in this report reveals the importance of national laws and decrees, indicating these as a key tool for driving changes in the agri-food sector. It also highlights the importance of European-level initiatives, which account for a significant portion of the reviewed documents, showcasing the role of EU regulations in shaping national policies.

Key focus areas identified in this report include sustainability, education and training, animal production, business and entrepreneurship, and digitalization. The interconnected nature of these themes underscores the need for a holistic approach where education, policy, business, and sustainability are integrated.

I-RESTART brings together regulatory frameworks, funding opportunities, and stakeholder engagement, making the project pivotal in enhancing the skills landscape of the agri-food and veterinary sectors in Europe. Continuous collaboration among the project partners and alignment with evolving market needs are key to advancing the project outcomes.

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