



Joint Report:

Research of promotional strategies and lifelong learning opportunities on plant-based farming and consumption.

Education Centre Geoss, coord. (Slovenia),
Agricultural Institute of Slovenia (Slovenia),
XWhy Agency of Understanding (Lithuania),
Asociación Caminos (Spain),
Land Impresa Sociale (Italy),
Euracademy Association (Greece).



Deliverable information

Grant Agreement No.	2022-1-SI01-KA220-ADU-000086746
Project acronym	Com4AgriPlant
Project title	Comics for Promoting Plant-Based Agriculture
Project timeframe and duration	30 months – 31/12/2022 - 30/06/2025
Work package	WP2 - Research of promotional strategies and lifelong learning opportunities on plant-based farming
Status	Final version
WP responsible	Kmetijski inštitut Slovenije
Date of submission	31.7.2023

Project coordinator

Name	
Organisation	Izobraževalni center Geoss d.o.o.
Email	projekti@ic-geoss.si
Postal address:	Cesta komandanta Staneta 2 1270 Litija Slovenia

Table of Contents

	Table of Co	ontents	3
1.	. Introduc	ction	6
2.	. Researc	h Methodology	7
3.	. Policies		9
		sting policies on promotional strategies in the field of plant-based farming ion at European level	g and 9
		sting policies on promotional strategies in the field of plant-based farming ion at National/Local level	g and 12
	3.2.1	Slovenia	12
	3.2.2	Greece	12
	3.2.3	Italy	13
	3.2.4	Lithuania	14
	3.2.5	Spain	14
		sting policies on lifelong learning opportunities in the field of plant-based farmin ion at European level	ng and 15
		sting policies on lifelong learning opportunities in the field of plant-based farminion at National/Local level	ng and 16
	3.4.1	Slovenia	16
	3.4.2	Greece	17
	3.4.3	Italy	17
	3.4.4	Lithuania	17
	3.4.5	Spain	18
4.	. Stakeho	lders	19
	4.1 Exis	sting stakeholders in the field of promoting plant-based farming and consumpt level	tion at 19
	4.2 Exis	sting stakeholders in the field of promoting plant-based farming and consumpt ocal level	tion at 20
	4.2.1	Slovenia	20
	4.2.2	Greece	21
	4.2.3	Italy	21
	4.2.4	Lithuania	22

4.2.5	Spain	22
	sting stakeholders of lifelong learning opportunities in the field of plant-based farm Imption at European level	ing 23
	sting stakeholders of lifelong learning opportunities in the field of plant-based farm Imption at National/Local level	ing 24
4.4.1	Slovenia	24
4.4.2	Greece	24
4.4.3	Italy	25
4.4.4	Lithuania	25
4.4.5	Spain	26
5. Good ex	kamples/practices	27
	mples/practices of promotional strategies/actions in the field of plant-based farm imption at European level	ing 27
	mples/practices of promotional strategies/actions in the field of plant-based farm Imption at National/Local level	ing 28
5.2.1	Slovenia	28
5.2.2	Greece	28
5.2.3	Italy	29
5.2.4	Lithuania	30
5.2.5	Spain	30
	mples/practices of lifelong learning opportunities in the field of plant-based farm imption at European level	ing 31
	mples/practices of lifelong learning opportunities in the field of plant-based farm Imption at National/Local level	ing 32
5.4.1	Slovenia	32
5.4.2	Greece	32
5.4.3	Italy	33
5.4.4	Lithuania	34
5.4.5	Spain	34
6. Challen	ges	35
6.1 Ider consumpt	ntified problems/challenges in the field of promotion of plant-based farming a ion	nd 35
	ntified problems/challenges in the field of lifelong learning opportunities ed farming and consumption	of 36

7.	Online surveys results for organisations	38
8.	Online surveys for individual respondents	47
9.	Conclusion	57
10.	References	59

1. Introduction

This document presents an expansive and insightful overview of the research undertaken on promotional strategies and lifelong learning opportunities in the dynamic field of plant-based farming and consumption carried out in Slovenia, Lithuania, Italy, Spain and Greece as well as at EU level, in the framework of the COM4AGRIPLANT project.

The goal of the project is to create educational literature that is engaging and appealing to the stakeholders that will use it to further educate and promote the end beneficiaries on the topics of plant-based farming and consumption.

The purpose of this research was to combine current and relevant information to create valuable educational resources specifically designed for adult educators, counsellors, and lecturers working with individuals who have a keen interest in plant-based agriculture.

In order to achieve this goal, the research methodology employed a comprehensive and multi-faceted approach. It involved a meticulous literature review, delving deep into existing scholarly works, and drawing upon previous research conducted in this domain. Additionally, desk research was carried out to explore relevant documents and reports from various organisations related to plant-based farming and consumption. Online surveys were utilised to gather data from a wide range of individuals, while interviews with key stakeholders enriched the study by incorporating diverse perspectives and insights from local, national, and even European levels.

Plant-based farming is a newer form of agriculture where the production of plants is intended exclusively for human consumption. In other words, we grow plants on the fields only for human needs and not for animal needs, such as e.g. production of animal feed. We could also say that this type of agriculture is based on the principle of using plant resources and avoiding or minimizing the use of animal resources in farming. Plant-based farming can take many forms, from small-scale subsistence farming to large-scale industrial agriculture. It includes a range of practices such as crop rotation, soil conservation, and the use of organic or sustainable farming practices. This type of agricultural production encompasses a wide range of activities related to the production of various plant crops and has recently become highlighted due to its potential benefits for the environment, health and animal welfare. Plant-based farming is considered a more sustainable and ethical alternative to animal husbandry and is often touted as a way to reduce greenhouse gas emissions, conserve water and promote biodiversity.

In recent years, plant-based diets have become increasingly popular as awareness has grown of the health and environmental benefits of a diet rich in fruits, vegetables, and whole grains while reducing the consumption of animal products. A plant-based diet has been shown to reduce the risk of chronic diseases such as heart disease, diabetes and some cancers, in addition to being more sustainable and ethical in terms of animal welfare and environmental impact. A plant-based diet is the consumption of plant-based foods such as fruits, vegetables, grains, legumes, nuts, and seeds as the main source of nutrition. Plant-based diets can vary in strictness, from completely vegan (excluding all animal products) to eating small amounts of animal products such as fish or dairy or in general focusing on

consuming primarily plant-based foods and meals. The focus of a plant-based diet is on whole foods that are as minimally processed as possible and are high in nutrient density and fibre. This type of diet has been shown to have several health benefits, including reducing the risk of chronic disease. A plant-based diet is often considered more sustainable and ethical than a diet that relies heavily on animal products because it requires fewer natural resources and has a smaller environmental footprint. It does not necessarily mean excluding animal products and foods altogether, but rather focusing on prioritising on consuming foods from a plant-based source instead of choosing a more environmentally impactful animal food source. Heavily processed plant-based foods and excessive consumption of sugar or refined carbohydrates can still have negative health effects. Overall, a plant-based diet is one that emphasises whole plant foods for optimal health and sustainability.

The culmination of these efforts is a comprehensive joint report that provides an in-depth analysis of existing promotional strategies and lifelong learning opportunities. This detailed report encompasses a wide array of topics, such as successful campaigns, impactful actions, strategic plans, innovative initiatives, effective methodologies, practical tools, enriching courses, and accessible platforms all centred around the theme of plant-based farming and consumption.

The findings of this research represent a valuable and essential resource for the development of educational materials and training programs. By equipping adult educators with up-to-date knowledge and a plethora of resources, the ultimate aim is to foster and advocate for sustainable agricultural practices while simultaneously encouraging the adoption of plant-based diets. Through this empowerment, the hope is that adult educators will be better equipped to inspire positive change and influence individuals to make conscious choices that benefit not only their own health but also the environment.

In conclusion, this research significantly contributes to a comprehensive understanding of the current landscape of promotional strategies and lifelong learning opportunities in the realm of plant-based farming and consumption. The insights garnered from this study can effectively inform decision-making processes, inspire the development of policies that promote sustainability, and lay the groundwork for innovative educational initiatives in this ever-evolving field. Ultimately, the knowledge and perspectives presented in this document pave the way for a greener and more conscious future, where plant-based agriculture plays a pivotal role in shaping a sustainable and environmentally responsible society.

2. Research Methodology

The methodology used in the development process involved a comprehensive and systematic research approach aimed at examining existing promotional strategies and lifelong learning opportunities in the realm of plant-based farming and consumption. This research encompassed various data collection methods, including literature review, desk research, online surveys, and semi-structured interviews with key stakeholders in the partner countries. This comprehensive analysis aims at identifying and building the bases on the subject of lifelong learning opportunities in plant-based consumption and farming, by presenting a general frame of its current situation in the several countries involved and providing the starting point for the creation of new educational resources that Com4AgriPlant intends to develop.

The initial step of the methodology involved conducting a thorough literature review on existing policies, stakeholders, examples and challenges on the topic of promotion and lifelong learning opportunities in the field of plant-based farming and consumption. This involved delving into relevant literature, research papers, reports, and existing studies to gain insights into the promotional strategies and lifelong learning opportunities pertaining to plant-based farming and consumption. By examining existing knowledge and understanding of the topic, this literature review provided a strong foundation for the subsequent research. The research was conducted by individual partners from Slovenia, Lithuania, Italy, Spain and Greece with the goal of finding and existing advances in this field or any similar advances that are in close association to the main goal. All of the partners did a thorough examination of the policies, stakeholders and examples found at EU level as well, which gives a good overview of the existing advances done with the similar goals on this level that are mentioned in the report.

Following the literature review, extensive desk research was conducted. This involved scouring various sources, including government publications, organisational websites, industry reports, and relevant databases, to gather comprehensive information on existing promotional campaigns, actions, plans, initiatives, and policies related to plant-based promotion and lifelong learning opportunities. By examining data at the local, national, and European levels, the research aimed to capture a broad and diverse range of insights and practices.

To gather first-hand perspectives and experiences, online surveys were developed and disseminated among stakeholders involved in plant-based farming and consumption. These surveys were designed to collect information on stakeholders' experiences, perceptions, and opinions regarding promotional strategies and lifelong learning opportunities. Local policy makers, NGOs, agricultural organisations, environmental associations, and other relevant stakeholders were invited to participate, providing a diverse range of perspectives that enriched the research findings. Please note that the insights from the survey should be approached with caution. The survey was not intended to be representative, and the data's limitations should be acknowledged when interpreting the findings.

In addition to surveys, semi-structured online interviews were conducted with key stakeholders in the partner countries. These interviews aimed to obtain in-depth insights into the promotional strategies and lifelong learning opportunities within the field of plant-based farming and consumption.

Representatives from agricultural and environmental ministries and other pertinent organisations were interviewed, allowing for a deeper understanding of the subject matter.

Once the data collection phase was complete, the research team undertook a rigorous process of data analysis. The collected data from literature reviews, desk research, surveys, and interviews were subjected to appropriate qualitative and quantitative analysis techniques. This analysis involved identifying common themes, patterns, and trends in the data, as well as extracting key findings related to promotional strategies and lifelong learning opportunities. The systematic analysis allowed for a comprehensive understanding of the current landscape and provided a basis for developing actionable recommendations.

The culmination of the research efforts was the synthesis and reporting stage. The findings from the data analysis were synthesised to create a comprehensive joint report on existing promotional strategies and lifelong learning opportunities in plant-based farming and consumption. The report encompasses various aspects, including promotional strategies such as campaigns, actions, plans, and initiatives, as well as lifelong learning opportunities and resources such as methodologies, tools, courses, and platforms. By covering the local, national, and European levels, the report provides a holistic overview of the subject matter, allowing stakeholders to gain a comprehensive understanding of the current state of affairs.

By employing this rigorous methodology, the research team was able to gather relevant and up-to-date information on promotional strategies and lifelong learning opportunities in the field of plant-based farming and consumption. The findings from this research will serve as a solid foundation for the subsequent work packages, contributing to the development of the learning methodology, innovative toolkit, and training course. Moreover, the insights gained through this research will aid in the achievement of the project's overall objectives by empowering adult educators, counsellors, and lecturers with valuable resources and knowledge.

3. Policies

3.1 Existing policies on promotional strategies in the field of plant-based farming and consumption at European level

The promotion of plant-based farming and consumption has gained significant attention in recent years as a multi-faceted strategy to address environmental sustainability, health concerns, and food security within the European Union (EU). European countries and organisations have made steps in terms of policies and initiatives to encourage the transition to more sustainable agricultural systems, but rarely these advances are defined as plant-based farming practices. The terminology of plant-based farming practices and consumption is not well defined on some levels or countries, so even if a policy conjointly contributes to similar goals, it may not be defined as a plant-based advance. At the European level, the **Common Agricultural Policy (CAP) for the period 2023-2027**, orchestrated by the European Commission, aims to secure the future of agriculture and forestry while aligning with the objectives of the **European Green Deal**. Though not explicitly mentioning the promotion of plant-based farming or consumption, the CAP centres on environmental care, climate change mitigation, and adaptation. Each EU country has designed a national CAP strategic plan that aligns with the overarching principles of the European Green Deal.

Moreover, the European Commission co-funds campaigns to promote European agricultural products globally, including fresh fruits and vegetables. The 2023 call for proposals AGRIP-SIMPLE 2023 focuses on highlighting sustainable practices in EU agriculture and encourages the consumption of fresh and healthy products, explicitly including plant-based alternatives.

International organisations and research institutions have also played an essential role in advocating for plant-based agricultural systems. For instance, the Greenpeace International report titled "Less is more, Reducing meat and dairy for a healthier life and planet: the Greenpeace vision of the meat and dairy system towards 2050" emphasises the need for a global reduction in animal product consumption by 2050, addressing both environmental and health impacts.

Additionally, Safe Food Advocacy Europe, Grow Green, and The Vegan Society have collaborated to highlight the broken food production system in the EU and advocate for the benefits of growing plant proteins. These initiatives discuss the EU political context, the Farm to Fork Strategy, and the future Common Agricultural Policy for the programming period 2021-2027, all of which support sustainable plant-based production within the region. International plant-based food trade associations have also united in a policy paper, urging global leaders at COP27 to establish clear targets for transitioning the food system in favour of plant-based approaches. This paper aligns with the broader objective of

reducing meat consumption and promoting sustainable diets as a transformative strategy to meet climate goals and address food security concerns.

The Food and Agriculture organisation of the United Nations contributes to the discourse through its foresight report titled "Thinking about the future of food safety," which explores climate change impacts on food safety, changing consumer preferences, and the growing interest in plant-based foods and alternatives for meat, dairy, eggs, and seafood. Another publication by the same organisation, "The future of food and agriculture - Alternative pathways to 2050," highlights changing dietary preferences and raising consumer awareness on environmentally sustainable diets as key strategies for a more sustainable food system.

Furthermore, the EU has established regulations governing organic farming, which support plant-based farming practices by promoting sustainable methods, biodiversity conservation, and the use of organic inputs. These regulations are consistent with the principles and requirements of organic farming, making plant-based farming practices, such as using plant-based fertilisers and natural pest control methods, relevant and applicable. The European strategy "Farm to Fork" is a crucial component of the European Green Deal, addressing various aspects related to agriculture and food systems. Though not explicitly promoting a shift to plant-based agriculture, the strategy aims to reduce the environmental and climate footprint of animal production through endorsing innovative approaches and sustainable practices within the existing system. School fruit, vegetables, and milk schemes implemented across the European Union support the distribution of these products to children in schools, hospitals, and charitable organisations.

Such schemes aim to encourage children to consume more fruits and vegetables, including plant-based alternatives, by providing free supplies and promoting healthy eating habits through various educational measures and activities. The European Green Deal encourages greater consumption of fruit, vegetables, and plant proteins through organic farming by setting the objective of having at least 25% of the EU's agricultural land under organic farming. This promotes sustainable farming practices aligned with environmentally friendly agriculture, such as crop rotation, mixed cropping, cover crop utilisation, low-intensity grass-based livestock systems, and adherence to organic farming principles. Furthermore, grassroots initiatives like the Plant-Based Treaty advocate for global adoption of healthier, sustainable plant-based diets to combat ecosystem degradation caused by animal agriculture and promote biodiversity and ecosystem services. Although not official policies, these initiatives have garnered support from individuals, organisations, businesses, and cities worldwide.

In conclusion, some of the policies and initiatives at the European and international levels collectively aim to promote environmentally friendly and sustainable agricultural practices as a transformative strategy for achieving environmental sustainability, enhanced health, and improved food security within the European Union and beyond. It is worth mentioning that these policies do not specifically promote a lesser known practice of plant-based farming in particular, which should be addressed in the future, even if they aim to achieve similar goals and advances in sustainability of agriculture. These efforts underscore the growing recognition of the critical role that plant-based alternatives play in fostering a more environmentally friendly and healthy food system. Additionally, organisations like Slow Food have conducted research and developed documents highlighting the relationship between the agri-food system, climate change, and eco-sustainable practices. They prioritise plant-based consumption as a means to address the climate crisis and reduce agriculture focused on animal consumption.

As it can be seen from above, the promotion of sustainable and environmentally friendly practices is a growing trend in the international policy landscape, driven by concerns for environmental sustainability, health, and food security. Although explicit mentions of plant-based farming are not often present in every policy or initiative, there is a clear movement towards more sustainable and environmentally friendly farming practices, which would naturally involve a shift towards more plant-based agricultural systems. Non-governmental organisations, research initiatives, and advocacy groups also play a vital role in propelling this shift. It's evident that a transformative shift in agricultural practices and food consumption patterns should be underway, underscored by the increasing emphasis on plant-based farming and diets. More explicit goals and strategies, along with consistent international commitment, are required to fully realise this transition. However, according to data from the Organisation for Economic Co-operation and Development (OECD), global meat consumption has been steadily increasing over the past decades. In 2020, the average person was expected to consume around 34.3 kilograms of pork, 29.2 kilograms of poultry, and 14.5 kilograms of beef and veal (Statista, 2022). These numbers, compared to consumption data from a decade ago, show a rising trend in meat consumption. In the European Union, meat consumption per capita increased from 64.4 kilograms in 1990 to around 69.3 kilograms in 2018, according to data from the European Commission. Even though the growth rate has slowed down compared to the global average, the trend is still towards more meat consumption. Moreover, the global demand for meat is projected to increase in the future, driven by factors such as population growth, urbanisation, and rising incomes, particularly in developing countries.

3.2 Existing policies on promotional strategies in the field of plant-based farming and consumption at National/Local level

3.2.1 Slovenia

The promotion of plant-based farming and consumption in Slovenia has been a focal point in recent years, with policies and initiatives at both national and local levels aimed at encouraging sustainable agricultural practices and dietary changes. **The Strategic Council for Nutrition**, established in Slovenia on December 1ST 2022, plays a crucial role in providing opinions and proposals to the Prime Minister concerning food. It focuses on updating national dietary guidelines, promoting sustainably produced food, and raising public awareness about the need to change dietary habits for health, environmental, and climate reasons. **The Common Agricultural Policy Strategic Plan 2023-2027 for Slovenia** emphasises sustainable resource management, climate change mitigation, and biodiversity conservation. This plan incentivizes exceptional farming practices through conditional rules and payments for farmers and promotes the plant-based farming sector, highlighting organic

agriculture, renewable energy, efficient resource use, and quality schemes. Furthermore, **Slovenia's long-term climate strategy resolution until 2050 (ReDPS50)** underlines the promotion of plant-based agriculture and a reduction in animal product consumption. It provides financial incentives for farmers transitioning to plant-based production, encourages public education on the benefits of plant-based diets, and supports the development of new technologies in plant-based food production and processing.

Additionally, the national program on strategic directions for the development of Slovenian agriculture and food industry "Our food, countryside, and natural resources from 2021" (ReNPURSK) outlines strategic directions for the development of Slovenian agriculture, emphasising the importance of sustainable practices, efficient waste management, and maintaining a vibrant rural environment. At the local level, the Long-term development program of the municipality of Litija 2016-2022 (DRP) encourages sustainable development in the fields of economy, agriculture, and tourism, while the Regional development program of the Ljubljana urban region 2021 - 2027 prioritises the preservation of agricultural land, supports organic production, and aims to promote greater recognition and consumption of local foods. These policies collectively underscore Slovenia's commitment to promoting plant-based farming and consumption as a vital strategy in achieving a more sustainable and environmentally friendly food system.

3.2.2 Greece

The National Strategic Plan for Rural Development encompasses various agricultural practices, including organic farming, supporting the development of sustainable and environmentally friendly methods. While not solely focused on plant-based farming, this plan aims to enhance agricultural competitiveness, resource efficiency, biodiversity protection, and sustainable land management practices. Greece also has **legislation in place to protect animal welfare**, contributing to ethical and sustainable farming practices. Moreover, farmers in Greece may choose to implement the guidance of the **Biocyclic Vegan Standard**, which promotes sustainable and ethical farming by combining organic principles with a vegan approach. However, Greece lacks specific strategies or recommendations for promoting plant-based diets. The National Nutritional Guides for adults and children/adolescents encourage vegetable and fruit consumption and discourage processed meat consumption, but still recommend regular meat (2-3 times a week) and fish/seafood (3 times a week) consumption without explicit guidance on plant-based diets. Overall, while Greece emphasises sustainable agricultural practices and animal welfare, specific policies dedicated solely to promoting plant-based farming or consumption are currently absent. There is currently no specific policy at the local level for the promotion of plant-based farming. However, broader policies and principles connected to sustainable and environmentally friendly agricultural practices align with the concept of plant-based farming.

3.2.3 Italy

In Italy, specific policies exclusively dedicated to promoting plant-based farming and consumption at the local and regional levels may be limited. However, broader agricultural policies and strategies often encompass various sustainable practices, including aspects of plant-based agriculture. In Sicily, for instance, the **Rural Development Programme (PSR) 2014/2022** financed partially by the European Agricultural Fund for Rural Development (EAFRD), includes in its 5th priority the importance of

stimulating resource efficiency and transitioning to low carbon and climate resilient economies in the agri-food sector, which includes plant-based farming as one of its spheres of action.

Additionally, the **Strategic Plan for Sicily 2023-2027**, operating under the framework of the **Common Agricultural Policy (CAP)**, supports the organic sector through payments aimed at compensating for lower revenues and higher costs faced by organic farmers, thus indirectly encouraging sustainable agricultural practices that may include plant-based farming. While no specific policies have been found at the local level in the municipality of Palermo to promote plant-based farming and consumption, it is essential to recognize that broader agricultural policies in Italy often incorporate sustainable and environmentally friendly practices, encompassing various aspects of plant-based agriculture.

3.2.4 Lithuania

In Lithuania, various policy initiatives at the national level demonstrate the country's commitment to promoting plant-based farming and consumption, improving dietary habits, and supporting environmentally friendly agriculture. The policy initiative "Concerning the approval of the procedure for the organisation of food in preschool education, general education school, and children's social care institutions" by the Ministry of Health emphasises the importance of healthier food choices in educational settings, encouraging the inclusion of fruits and vegetables in the daily menu while reducing meat consumption. Additionally, the support measure "Agri-environment and Climate Change" includes the activity "Environmentally friendly fruit and vegetable production system" which provides incentives to growers of environmentally friendly products, promoting sustainable practices in fruit and vegetable production.

Furthermore, municipal public health offices in Lithuania have developed **recommendations to raise awareness and encourage increased vegetable consumption** among the population, addressing the low consumption levels reported in dietary surveys. These policy efforts collectively contribute to fostering a more sustainable and health-conscious society in Lithuania, promoting plant-based agriculture, and supporting environmentally friendly practices for a healthier and environmentally responsible future.

3.2.5 Spain

The relevant national paper in line with the common EU policy is "Spain's common agricultural policy strategic plan (PAC) 2023-2027". It defines the conditions and provides the relevant framework for the agricultural sector in Spain for the upcoming 4 years. There are 4 main sections in this paper, the steady food supply at affordable prices, the preservation of the environment and fight against climate change, the population settling and job creation in rural areas and the direct and indirect job creation in the agri-food sector. The way these main goals are defined show that Spain puts emphasis on social issues, such as affordable food prices for its population, development of rural areas and job creation in this sector. Within the sections of economy, environment and rural/social development it defines specific goals to achieve. These goals have been developed along the needs of the agricultural sector and rural areas themselves. The plan defines a target plan and measures, as well as specific monitoring and reporting on them. It was developed by Spain's autonomous communities, entities from the

agri-food sector, authorities with competencies in environmental and climate issues, economic and social partners and relevant bodies representing civil society. This national paper also regulates the direct payments, sectoral measures and rural development measures with supra-autonomous scope. Furthermore, the national plan provides promotion materials and training for professionals. On a regional level each community has its regional plan, in Andalusia for example the PAC of the Junta de Andalucía. In the SIGPAC the Junta defines the measures to promote the plan on the level of the autonomous community.

As pointed out before both papers put more emphasis on social or environmental topics than on plant based farming and nutrition. This may also be evaluated in the context that major parts of Spain's agriculture are already plant-based, given the fact that Spain is the largest producer of olives, producing about 25% of Europe's vegetables and 35% of world wine production. Plant based nutrition is traditionally not in the spotlight of Spain's population, but there are examples in later sections of this paper.

3.3 Existing policies on lifelong learning opportunities in the field of plant-based farming and consumption at European level

In the realm of plant-based farming and consumption, the EU has established some policies and initiatives that promote lifelong learning opportunities and awareness on similar topics of sustainability, without mentioning the lesser known terminology of plant based farming and consumption, but with a conjoint goal. **The Common Agricultural Policy 2023-2027** by the European Commission facilitates knowledge exchange, advice, and training in sustainable practices for farmers, encompassing various aspects of agriculture.

The Good Food Institute (GFI) contributes to education in alternative proteins, offering valuable resources and an open-access online course on alternative proteins, including plant-based meat, covering biological, chemical, environmental, and economic aspects of these sectors. The European Green Deal emphasises the importance of organic farming and sustainable practices, promoting healthier and more sustainable diets with a greater use of plant-based foods, setting the objective of having 25% of EU's agricultural land under organic farming.

The Sustainable Food Systems Partnership for People, Planet, and Climate Strategic Research and Innovation Agenda (SRIA) collaboratively addresses research and innovation priorities in sustainable food systems, involving stakeholders from academia, industry, civil society, and policy-making.

Moreover, the "Farm to Fork Strategy" by the European Commission advocates for a fair, reliable, and environmentally friendly food system, encouraging healthier and more sustainable diets that

include regionally sourced plant-based foods, while considering cultural and regional diversity. These European-level policies and initiatives collectively aim to foster lifelong learning, knowledge dissemination, and awareness in plant-based farming and consumption, contributing to a more sustainable and health-conscious future for Europe.

3.4 Existing policies on lifelong learning opportunities in the field of plant-based farming and consumption at National/Local level

3.4.1 Slovenia

On the national level, Slovenia has several policies addressing lifelong learning opportunities in plant-based farming and consumption.

The Act on the Slovenian Framework of Qualifications ensures the recognition and acquisition of qualifications related to plant-based farming and consumption through formal education, emphasising defined standards and public documents as evidence of acquired qualifications. The Resolution on the national program **"Our food, countryside and natural resources from 2021"** plans to collaborate with NGOs to organise educational workshops and seminars on plant-based diets, while funding universities and colleges to develop courses on plant-based farming and consumption.

Additionally, the **Rural Development Program of the Republic of Slovenia for the period 2014–2020** supported lifelong learning opportunities in plant-based farming and consumption, offering knowledge exchange, practical training, and demonstration projects to improve skills and competencies for agricultural enterprises, forest owners, and young farmers. These policies demonstrate Slovenia's commitment to providing lifelong learning opportunities in plant-based farming and consumption, aiming to enhance skills, knowledge, and competencies in sustainable practices and contribute to the development of a more environmentally friendly food system.

Also, on the national level, there is a School scheme of fruit, vegetables and milk. The main objective of the scheme is to promote consumption of fruits, vegetables, milk and dairy products among children, prioritising locally sourced items and fostering healthier eating habits. By implementing the program in educational institutions, we recognize the crucial role they play in shaping children's nutritions habits during their formative years. The ultimate aim is to combat the rising rates of overweight and obesity in children as they are a significant factor for contemporary diseases.

At the local level in Slovenia, specifically in the Municipality of Litija, no specific policies or documents related to lifelong learning opportunities in the field of plant-based farming and consumption have

been found. However, in the Municipality of Ljubljana, the **Regional development program for 2021-2027** focuses on promoting skills transfer and reducing skills deficits in leadership and management on farms, with an emphasis on local growers as suppliers of quality locally produced food.

3.4.2 Greece

In Greece the lifelong learning opportunities in the fields of plant-based farming and diets are not offered through a specific strategy or framework, but rely on related initiatives carried out by individual stakeholders. These stakeholders include for example the Panhellenic Biocyclic Vegan Network and the Hellenic Vegetarian Association, that offer lifelong learning opportunities on plant-based farming and plant-based diets through awareness-raising campaigns, webinars, and training events.

3.4.3 Italy

In Italy, comprehensive policies and initiatives exist at both the national and local levels to promote lifelong learning opportunities in plant-based farming and consumption. Sicily's Rural Development Programme (PSR) 2014/2022, as part of the regional policy, encourages lifelong learning and vocational training in the agricultural and forestry sector, foreseen knowledge transfer and training actions. FEDERBIO, which is a federation of organizations from the entire organic and biodynamic farming chain, has created a Bio Academy, which serves as a hub for training and technical assistance in organic farming, collaborating with various organisations, including universities and agri-food companies, to develop a training catalogue aimed at strengthening the organic sector.

Slow Food, a global grassroots organization operating at both national and local levels, promotes sustainable agriculture, biodiversity, and local food traditions, which align with the principles of plant-based farming. **Associazione Italiana Agricoltura Biologica (AIAB)**, the network of the organic movement in Italy, represents the interests of organic producers, advocating for organic agriculture as a model of sustainable development, based on the principles of safeguarding and enhancing resources, respect for the environment, animal welfare and the health of consumers.

These initiatives offer courses, workshops, and technical assistance primarily targeting agricultural entrepreneurs, companies in the organic supply chain, and consultants, contributing to the advancement of knowledge and practices in plant-based farming and consumption in Italy.

3.4.4 Lithuania

In Lithuania, specific policies exclusively dedicated to lifelong learning opportunities in plant-based farming and consumption at the national and local levels have not been identified. However, various existing policies and initiatives indirectly contribute to knowledge and education in this area, for example "School fruit, vegetables and milk scheme and Strategy for the implementation of the school scheme in Lithuania from 2017/2018 to 2022/2023 ", concerning the approval of the

procedure for the organisation of food in preschool education, general education school, and children's social care institutions policy (focuses on healthier food choices in educational settings, creating opportunities for students to learn about plant-based foods). Support for producers of environmentally friendly products measures "Agri-environment and Climate Change," the "Environmentally friendly fruit and vegetable production system" activity (encourages environmentally friendly practices among growers of fruits and vegetables indirectly fostering knowledge sharing and learning opportunities), recommendations from municipal public health offices (aim to raise awareness about the importance of vegetable consumption indirectly contributing to understanding the benefits of plant-based foods and sustainable diets). These policies and initiatives create environments that promote knowledge and understanding about sustainable food choices and the role of plant-based diets in a healthy and environmentally friendly lifestyle, even though they do not explicitly target lifelong learning in the field of plant-based farming and consumption.

3.4.5 Spain

From the education department of the Junta de Andalucía there are existing resources. For this project the most relevant are the "healthy nutrition" and the "Plan for Consumption of fruits and vegetables"

In healthy nutrition a guide on how to apply these contents in schools can be found as well as materials and practical activities for teachers which can be used in schools with pupils but also families. Resources available are for example an Explanation on how to promote Active Health, Small Changes for eating healthier, Healthy food in school - a Guide for families and schools, a Nutrition Guide for planning menus in schools, Healthy and sustainable nutrition, an Infographic on healthy nutrition and a Water infographic. These topics demonstrate a clear focus on health, which includes information on more plant based nutrition, but is not limited to plant based nutrition.

In schools the Andalusian government promoted two main programmes: First a School programme addressing children aged 3 to 12 years and promoting the consumption of fruits and vegetables called "Frutibus" in which in the last year participated 2050 schools. Second an ecological school gardens project which was implemented by 1200 schools.

4. Stakeholders

4.1 Existing stakeholders in the field of promoting plant-based farming and consumption at European level

The promotion of plant-based farming and consumption at the European level involves a diverse group of stakeholders dedicated to sustainable and healthier food systems. Greenpeace European Unit focuses on protecting biodiversity and promoting sustainable farming systems while advocating for sustainable eating habits, including plant-based diets. Safe Food Advocacy Europe (SAFE) represents EU consumers in the food sector, advocating for comprehensive food regulations that prioritise health, environment, safety, and sustainability. The European Alliance for Plant-based Foods (EAPF) brings together organisations in the plant-based value chain, advocating for policies supporting plant-based foods, clear food labelling, fair market access, and research in sustainable plant-based solutions. European Environmental Bureau (EEB) advocates for progressive policies across various environmental areas, including agriculture and food systems, aiming for sustainable development, environmental justice, and participatory democracy. European Plant-based Foods Association (ENSA) represents plant-based food manufacturers, raising awareness about plant-based diets' benefits and promoting sustainable and healthier food consumption patterns. European Food **Information Council (EUFIC)** aims to make food and health science more accessible to the public, empowering European citizens to adopt healthier and more sustainable diets and lifestyles. The **International Plant Based Foods Working Group** consists of associations representing companies in the plant-based food space, collaborating to create a more humane global food system. The European Commission, particularly the Directorate-General for Agriculture and Rural Development (DG **AGRI)**, plays a significant role in shaping agricultural policies at the EU level, indirectly supporting plant-based farming practices.

Compassion in World Farming EU advocates against factory farming, while the **European Vegetarian Union (EVU)** promotes plant-based diets and the benefits of vegetarian and vegan products. **European Food Safety Authority (EFSA)** evaluates the safety and nutritional aspects of plant-based foods, ensuring their compliance with EU policies. **Agroecology Europe** promotes agroecology in sustainable farming and food systems, and **Biocycling Vegan International** advocates for a sustainable, closed-loop, and vegan-oriented form of organic farming. **The Slow Food Foundation for Biodiversity** works to preserve traditional food products and promote sustainable and diverse food systems. **The European Permaculture Network (EuPN)** collaborates with national permaculture associations and networks to strengthen organic and sustainable agriculture practices, indirectly contributing to plant-based farming initiatives. Several research and innovation

partnerships, such as the **Strategic Research and Innovation Agenda (SRIA)** for the Sustainable Food Systems Partnership for People, Planet, and Climate, and the European R&I partnership on agroecology living labs and research infrastructures (2023-2024), have been established to foster the transition towards agroecological and sustainable farming systems, which encompass plant-based approaches

These stakeholders collectively work towards fostering a more sustainable, conscious, and plant-based food system in Europe, emphasising the importance of promoting environmentally friendly agricultural practices and plant-based diets for the well-being of people, animals, and the planet. In the European landscape, a multitude of stakeholders play crucial roles in the promotion of plant-based farming and consumption. This chapter introduces a broad spectrum of these entities, which range from non-profit organisations and advocacy groups, to research centres, industry alliances, and governmental institutions. All share a common mission: to reshape our food system into one that's healthier, more sustainable, and fairer. From **Greenpeace European Unit's** focus on protecting biodiversity and promoting sustainable farming systems to the European Alliance for Plant-based Foods' advocacy for policies that support plant-based foods, the diversity and reach of these stakeholders is vast. Additionally, bodies such as the **European Environmental Bureau**, **European Plant-based Foods Association**, and the **European Food Information Council** contribute through various measures such as policy advocacy, raising public awareness, and making scientific information about food and health accessible to the public. Other significant actors are also mentioned in the following pages.

4.2 Existing stakeholders in the field of promoting plant-based farming and consumption at National/Local level

4.2.1 Slovenia

The Slovenian Vegan Society is a non-political and charitable organisation that brings together Slovenian vegans. They provide specialised nutrition instruction, professional assistance, and support for individuals who are vegan or aspire to adopt a vegan lifestyle. The society also focuses on promoting awareness about ecology, animal rights, and animal welfare. They collaborate with various celebrities and non-profit organisations and actively engage with the media to raise awareness about veganism in Slovenia. Their efforts over the years have contributed to increased familiarity and acceptance of veganism among the Slovenian population.

Juicy Marbles is a Slovenian startup that focuses on the development and production of plant-based meat alternatives. Their primary activity revolves around creating vegetarian steaks using innovative

technologies like 3D food printing. They aim to replicate the texture and taste of traditional meat products using plant-based ingredients. Juicy Marbles' efforts contribute to promoting plant-based farming and consumption by providing consumers with sustainable and appetising alternatives to animal-based meats.

The recently formed **Strategic Council for Nutrition in Slovenia**, Establisher on December 1st, 2022 holds a pivotal responsibility in advising and presenting recommendations to the Prime Minister regarding food-related matters. Its primary focus lies in updating the country's dietary guidelines, advocating for the consumption of sustainably produced food, and increasing public awareness about the significance of altering dietary habits for the betterment of health, the environment and climate considerations.

4.2.2 Greece

In Greece, various stakeholders play essential roles in promoting plant-based farming and consumption, contributing to the advancement of sustainable agriculture and healthier eating habits. The Panhellenic Biocyclic Vegan Network, in collaboration with Biocyclic Park, supports organic farmers in Greece and Cyprus, adhering to the Biocyclic Vegan Standard, and implementing environmentally friendly cultivation methods. Through the production of Biocyclic Humus Soil, Biocyclic Park enhances soil health and plant vitality, further promoting sustainable agricultural practices. The Hellenic Vegetarian Association (HellasVeg), affiliated with the European Vegetarian Union (EVU), advocates for the benefits of vegetarianism, including improved health, animal welfare, and environmental protection. Vegan Life, a non-profit organisation, actively spreads the vegan lifestyle, organising events and campaigns to defend animal rights and raise awareness about responsible consumption.

Agroecology Greece serves as a platform promoting agroecology as a sustainable food production system; while not explicitly focused on plant-based farming, it aligns with principles of sustainable agriculture and offers potential synergies. **The Hellenic Ministry of Rural Development and Food** plays a significant role in shaping national policies related to agriculture and food, while not having specific policies for plant-based farming to date. **The Centre for Consumers Protection**, through various channels, aims to raise awareness and inform consumers about various topics, indirectly impacting plant-based farming and consumption. Together, these stakeholders contribute to raising awareness, promoting sustainable agriculture, and fostering healthier and environmentally friendly food choices for the well-being of individuals and the environment in Greece.

4.2.3 Italy

At the local level, various agricultural cooperatives such as **Cooperativa Valdibella**, **Ciauli Agricoop**, **Terra Surti**, **Terra di Carusi**, and **Cooperativa Noe** are at the forefront of promoting sustainable and environmentally friendly practices in plant-based farming and consumption. These cooperatives bring together farmers who prioritise high-quality organic products and are committed to preserving biodiversity while respecting the environment. In addition to these cooperatives, there are several advocacy initiatives that play a crucial role in raising awareness about the importance of plant-based consumption and production in mitigating climate change. **Fridays for Future Palermo**, **Ecologia**

Politica Palermo, Assemblea Popolare Ecologista (A.P.E), A Sud Sicilia, and Extinction Rebellion are actively engaged in advocating for sustainable practices and environmental consciousness in the local and regional territories.

To drive the shift towards plant-based choices and promote sustainable consumption habits that re-orient citizens towards more plant-based, local and sustainable options that also benefit the local farmers, various organisations are also working at the local, regional, and national levels. **Slow Food Palermo, Slow Food Sicily,** and **Veg Sicilia** are actively involved in changing consumption habits and promoting the values of local, seasonal, and sustainable food choices. These organisations not only benefit local farmers but also raise awareness about the positive impact of plant-based, eco-friendly diets on the environment and health.

At the national level, vegan activist organisations like **Essere Animali** and **Associazione Vegani Italiani Onlus** are leading the charge in promoting plant-based consumption and advocating for its benefits in improving human health, environmental sustainability, and animal welfare. These organisations are key in the Italian context l in creating a shift towards a more compassionate and environmentally conscious society.

Furthermore, the involvement of public entities cannot be overlooked. **The Sicilian Regional Environmental Protection Agency (ARPA)** and **the Ministry of Agriculture** play vital roles in monitoring and regulating sustainable farming practices and environmental protection, thereby supporting the efforts of local farmers and advocacy groups.

In addition to grassroots organisations and advocacy groups, three prominent associations at the national level significantly contribute to the promotion of plant-based farming. The Italian Federation of Organic and Biodynamic Agriculture (FederBio) is actively working to promote organic farming practices, including plant-based agriculture, to support the development of sustainable food systems in Italy. Similarly, the Associazione Italiana per l'Agricoltura Biologica (AIAB) represents organic producers and advocates for plant-based agriculture and environmentally friendly farming methods. Lastly, the National Association of Organic and Natural Products Processing and Distribution Companies (AssoBio) which represents and supports companies involved in the processing and distribution of organic and natural products in Italy, while not exclusively plant-based, plays a pivotal role in making organic plant-based products more accessible and available in the market.

These collaborative efforts of stakeholders at various levels are paving the way towards a more sustainable and plant-based future in the field of farming and consumption. By coming together, these stakeholders are making significant strides in protecting the environment, supporting local farmers, and promoting healthier and more ethical choices for individuals and the community as a whole.

4.2.4 Lithuania

In Lithuania, various stakeholders contribute to promoting plant-based farming and consumption, advocating for sustainable agriculture, and encouraging healthy dietary choices. **CropLife Lietuva** emphasises a science-based approach and sustainable plant protection solutions, fostering the adoption of environmentally friendly farming practices among Lithuanian farmers. **The State Plant Production Service** under the Ministry of Agriculture focuses on ensuring plant health, quality, and environmental protection while raising public awareness of plant-related issues.

The Lithuanian Seed Growers Association (LSA) brings together seed producers and distributors, working to enhance seed production systems and improve qualifications in the field. The Centre for Health Education and Disease Prevention provides recommendations on plant-based foods to municipal public health offices, promoting the importance of vegetable and fruit consumption for good health.

Gyvi Gali organisation (Living Power) is dedicated to promoting plant-based nutrition, aiming to change dietary habits, increase plant-based food accessibility, and collaborate with businesses to offer diverse plant-based meal options Collectively, these stakeholders play essential roles in promoting plant-based agriculture, sustainable farming practices, and healthy eating habits in Lithuania.

4.2.5 Spain

Nationwide important in regards to information on plant based farming and nutrition is the AEPLA (the Association of Enterprises for the protection of the plants). Their aim is to guarantee healthy food for all and protection of the environment. But among their campaigns a lot of publications for plant based production and consumption can be found.

There are also several startups, mainly in Barcelona, but also in Basque Country, who are producing meat alternatives for the Spanish market, which is used to consume "Jamon, Chorizo and other meat specialities". The most important ones are Novameat, Librefoods, Heura, GrinGrin and Biotech Foods. Vegan Alternatives are most common in Barcelona and Madrid, also coming up in bigger cities but still very few in smaller populations or the countryside.

4.3 Existing stakeholders of lifelong learning opportunities in the field of plant-based farming and consumption at European level

Various stakeholders at the European level are actively involved in promoting plant-based farming and consumption through educational programs, research initiatives, and advocacy efforts. Institutions such as **Wageningen University & Research** offer lifelong learning opportunities in areas like food production, natural resources, and well-being, with a focus on sustainable practices. **Plant Based Academy** provides comprehensive courses in plant-based nutrition, lifestyle medicine, and regenerative farming, catering to professionals and individuals interested in adopting a plant-based lifestyle. **Humane Society International** conducts global educational outreach to raise awareness of animal welfare issues and encourages informed consumer choices, including shifting towards plant-based meals. **The European Vegetarian Union (EVU)** represents vegetarian and vegan societies across Europe, offering educational resources, workshops, and events to promote plant-based

consumption. **Biocyclic Vegan International** supports farmers transitioning to plant-based farming methods adhering to organic and vegan principles through webinars and educational resources. Additionally, the **Mediterranean Agronomic Institute of Bari (CIHEAM Bari)** contributes to lifelong learning in plant-based farming and consumption through educational programs and research.

Wikifarmer empowers farmers through education and market access, providing information on sustainable agricultural practices, including plant-based farming. Partnership for Research and Innovation in the Mediterranean Area (PRIMA) funds projects promoting sustainable natural resource use, economic growth, and stability in the Mediterranean region, supporting research in agriculture and food systems, including plant-based practices. The European Alliance for Plant-based Foods (EAPF) advocates for sustainable and healthy food systems, promoting plant-based alternatives to animal-based products. The European Plant-based Foods Association (ENSA) represents plant-based food manufacturers, raising awareness about sustainable plant-based diets. The European Permaculture Network (EuPN) collaborates to develop and strengthen permaculture practices, which indirectly contributes to the development of plant-based farming and consumption. These stakeholders play a crucial role in fostering knowledge, awareness, and support for sustainable and plant-based practices, contributing to a more sustainable and healthier food system in Europe.

4.4 Existing stakeholders of lifelong learning opportunities in the field of plant-based farming and consumption at National/Local level

4.4.1 Slovenia

Slovenian stakeholders in the field of lifelong learning opportunities provide a framework on a national and local level with their educational and promotional initiatives.

Institute of the Republic of Slovenia for Vocational Education and Training promotes lifelong learning through the **Slovenian Qualifications Framework**. They offer resources, training, and events in various fields, including agriculture. Their courses focus on sustainable production and processing, addressing specific problems using scientific methods and procedures. They contribute to the development of knowledge and skills related to sustainable agriculture.

Slovenian Institute for Adult Education (SIAE) is the leading national institution for the development and research of adult education. They are a partner in implementing the lifelong learning strategy in Slovenia. While not specifically focused on plant-based farming, they contribute to education for sustainable development. Their efforts align with the vision of sustainable food production, emphasising accessibility and high-quality education for all adult residents of Slovenia.

The Slovenian Vegan Society is dedicated to spreading awareness about veganism and promoting lifelong learning. They offer engaging workshops and provide informative newsletters to educate individuals about the health benefits, ethical considerations, and positive environmental impact of a plant-based lifestyle. By fostering a community of learners, they encourage on-going education and support individuals in their transition towards a sustainable and compassionate world.

University of Ljubljana and **University of Maribor** both include educational programmes for agricultural and biosystemic sciences, adding to lifelong learning opportunities in these sectors. The educational system in Slovenia also includes high schools with the emphasis on biotechnical knowledge that highlight knowledge on the environment, technical skills and sustainable practices with after school programs for children and young adults, for example **Biotechnical centre Naklo** or **Biotechnical School Maribor**.

4.4.2 Greece

The Greek stakeholders that actively contribute or have the potential to contribute to lifelong learning opportunities in plant-based farming and consumption through awareness campaigns, education, and research, are presented below. The Panhellenic Biocyclic Vegan Network offers training events, webinars, and awareness campaigns to promote biocyclic vegan agriculture and sustainable farming practices in Greece. The Hellenic Vegetarian Association focuses on raising awareness about the benefits of plant-based diets through educational campaigns, events, and resources on plant-based nutrition and lifestyle choices. While not explicitly cantered on plant-based farming, the Agricultural University of Athens conducts studies and research projects contributing to sustainable agriculture practices. Additionally, the Greek Agricultural Organisation DIMITRA (ELGO-DIMITRA) plays a significant role in the modernization and development of the agricultural sector in Greece, including agricultural vocational education and training, with the potential to integrate plant-based farming based on reliable knowledge and experience. The stakeholders above contribute to enhancing knowledge, skills, and awareness of plant-based farming and consumption in Greece, and foster more sustainable and environmentally friendly agricultural and consumer practices.

4.4.3 Italy

In Italy different stakeholders can be found, linked to public and independent education initiatives. Regarding formal education, the **University of Palermo and its Faculty of Agriculture** offers educational programs and research opportunities in various fields, including agriculture. Students can pursue studies related to plant-based farming and sustainable agriculture, gaining theoretical and practical knowledge in the subject.

Some other entities that are trying to provide independent learning opportunities are:

Rete Fattorie Sociali Sicilia, which is a network of Sicilian social farms that offers cultural, educational, care, training, and social-work integration services for vulnerable people. While their primary focus is on social initiatives, they also contribute to agricultural education and provide opportunities for learning about plant-based farming practices.

Coltivare Bio Naturale association, accredited by UNIPA (University of Palermo), serves as an apprenticeship centre for students attending the Faculty of Agricultural, Food and Forestry Sciences. They provide theoretical-practical courses, allowing students to learn and gain hands-on experience in organic farming.

Accademia Bio, organisation that brings together lecturers and organic technicians of national and international reference. They design and offer courses to provide training in organic farming, contributing to lifelong learning opportunities for individuals interested in sustainable agricultural practices.

Legambiente, a non-profit association that focuses on environmental protection, quality of life, and social justice. It develops projects in various areas related to climate change and sustainability. While not solely focused on plant-based farming, they contribute to raising awareness and promoting sustainable practices in agriculture.

Hort@, which is an educational organization that provides services to agricultural and agro-industrial supply chains, with a focus on increasing competitiveness, sustainability, and food safety. They offer courses on digitization and technological innovation in agricultural college curricula, emphasising sustainable crop management.

Collectively, these stakeholders contribute to the creation of a comprehensive learning ecosystem that supports the acquisition of knowledge and skills in plant-based farming and sustainable agriculture in Italy. Through their efforts, they promote the adoption of more environmentally friendly and ethical agricultural practices across the country. Their dedication to lifelong learning opportunities ensures a sustainable future for agriculture and reinforces the significance of plant-based farming in promoting environmental and societal well-being.

4.4.4 Lithuania

Several stakeholders in Lithuania actively contribute to lifelong learning opportunities in the field of plant-based farming and consumption. **CropLife Lietuva** focuses on fostering a science-based approach and creating a favourable regulatory environment in the agricultural sector. They aim to raise awareness and promote informed discussions on innovative and sustainable plant protection solutions, enabling farmers to grow healthy crops while effectively managing pests, weeds, and diseases. **The State Plant Production Service**, operating under the Ministry of Agriculture, plays a crucial role in strengthening plant production in Lithuania. They ensure plant health, quality, and environmental protection while increasing public awareness and supporting sustainable farming practices. **The Lithuanian Seed Growers Association (LSA)** brings together producers and distributors of agricultural plant propagating material, aiming to implement an efficient seed production system and improve the qualifications of specialists in the field. **The Centre for Health Education and Disease Prevention** provides recommendations for municipal public health offices,

emphasising the importance of consuming sufficient amounts of vegetables and fruits and developing strategies and programs to raise awareness and promote healthy eating habits.

The organisation "Gyvi Gali" (Living Power) was established to promote plant-based nutrition in Lithuania by changing eating habits and increasing the accessibility of plant-based food. They focus on education, collaboration with businesses, and providing consultations to create a favourable environment for the development of plant-based food businesses and encourage the offering of healthy plant-based meal options in public institutions. They contribute to the dissemination of knowledge and awareness about plant-based farming and consumption, fostering the adoption of sustainable and ethical practices in Lithuania's agricultural sector.

4.4.5 Spain

The **Ministry of Science and Innovation** supports a website called "sustainable agriculture in the classroom". The aim of this page is to support teaching professionals in structuring their lessons on sustainable agriculture and healthy food. They provide materials but also a blog where results of experimentations can be published.

The Andalusian Government - the Junta de Andalucía, department of sustainability, environment and blue economy provides information for the teaching community, about what can be done for the impact of climate change, the conservation and improvement of biodiversity, forest ecosystems and the flora in forests. It addresses the teaching community in non-university centres as well as associations and organisations working in these fields.

An **online Master Study** provided by the university of Valencia on innovative technologies and conservation of food as well as valorisation of the sub products show that the subject of nutrition reached university teaching level. It starts in October 2023, costs 1000 Euros, includes 900 hours of practice and has 60 ECTS credits.

5. Examples/good practices

5.1 Examples of promotional strategies/actions in the field of plant-based farming and consumption at European level

Examples of promotional strategies and actions at the European level in the field of plant-based farming and consumption include campaigns and initiatives that encourage individuals to adopt plant-based diets and promote sustainable food choices. **Meat Free Monday** advocates for having at least one plant-based day each week to reduce the environmental impact of animal agriculture, providing diverse plant-based recipes and guidelines for schools and caterers. **Veganuary** encourages people worldwide to try veganism for the month of January and beyond, engaging in corporate outreach and media campaigns to raise awareness about the benefits of plant-based diets. **One Meal a Day for the Planet (OMD)** urges individuals to swap at least one meal a day with a plant-based option, promoting climate-friendly diets and advocating for system changes in schools, businesses, and communities. These campaigns and initiatives provide online platforms with resources, recipes, and information to support individuals in adopting plant-based diets and contribute to raising awareness about the importance of sustainable and plant-based food choices. In addition to campaigns, there are research projects and standards that contribute to plant-based farming.

The Smart Protein Project is an EU-funded initiative focused on developing cost-effective and nutritious plant-based foods using alternative protein sources like legumes and by-products of beer and pasta production. The Biocyclic Vegan Standard is an internationally recognized organic farming standard that promotes plant-based agriculture without animal inputs, emphasising soil fertility and biodiversity. Furthermore, VeggieWorld serves as a major platform in Europe for showcasing vegan products and culinary experiences, promoting plant-based lifestyles and sustainable living. These examples highlight initiatives and actions across Europe that work towards promoting plant-based farming and consumption, supporting sustainable food choices and a more environmentally friendly future.

5.2 Examples/practices of promotional strategies/actions in the field of plant-based farming and consumption at National/Local level

5.2.1 Slovenia

Promotional strategies at the national and local level in Slovenia to encourage plant-based farming and consumption include Vegafest, the biggest vegan festival in Slovenia (11th edition in 2023), in the Municipality of Ljubljana. It aims to raise awareness about the benefits of a vegan diet and lifestyle, encouraging people to have at least one vegan day each year to support animals, the environment, and personal health. The Slovenian Vegan Association organises "The Vegan Challenge", inviting participants to follow a vegan diet and consume animal-free products for 30 days without interruptions. This initiative aims to demonstrate the feasibility of a vegan lifestyle and provide support and resources to individuals exploring plant-based eating. Additionally, the Travel **Association of Slovenia** offers practices to promote plant-based eating while travelling. They suggest creating a list of vegan-friendly restaurants in advance using platforms like "Happy Cow", checking with vegetarian and vegan associations for recommendations, and connecting with local vegans for insights on vegan-friendly establishments. Carrying a personal food supply is advised for situations with limited vegan options, and understanding local languages and reading labels is crucial for identifying suitable vegan products. The association emphasises the importance of facilitating understanding and promoting vegan-friendly meal alternatives while offering assistance in food preparation, recognizing the growing interest in plant-based diets even during travel.

By implementing these initiatives and campaigns, Slovenia actively supports the growth of plant-based farming and consumption in the country. These efforts provide platforms, resources, and information to support individuals in adopting plant-based diets, raise awareness about the benefits of plant-based agriculture, and promote sustainable and compassionate food choices at the national and local levels. As interest in plant-based lifestyles continues to rise, these strategies contribute to building a more sustainable, compassionate, and health-conscious society in Slovenia.

5.2.2 Greece

Promotional initiatives in Greece to encourage plant-based farming and consumption are presented below:

The Hellenic Vegetarian Association (HellasVeg) conducted a consumers' survey titled "What consumers want: A Survey of the dietary habits of Greek consumers". The survey involved 700 participants from all over Greece and aimed to understand their food consumption habits, preferences, attitudes towards plant-based alternative foods and new technologies, and their willingness to alter their dietary habits in the future. The survey findings were presented in a Survey Report, comparing the "food tribes" in Greece to those in the EU. Topics covered included the frequency of animal product consumption, willingness to adopt plant-based alternatives, and the main reasons for choosing plant-based foods. The results were disseminated widely in Greece through radio channels, articles in print press, and online publications, contributing to increased awareness and understanding of plant-based options.

Another significant event is the **Vegan Life Festival**, organised by Vegan Life NGO. It began in Athens in 2016 and expanded to Thessaloniki and Chania, becoming the largest vegan event in Greece. The festival features talks, workshops, children's activities, art events, and the largest exhibition of vegan products and services in the country. It aims to promote the vegan lifestyle and showcase the variety of plant-based options available, attracting thousands of attendees each year.

Moreover, the annual **Vegan Awards** recognize excellence and innovation in products and services that promote the vegan lifestyle. Highlighting various industries such as food, personal care cosmetics, hygiene products, nutritional supplements, clothing, and accessories, the awards highlight products and services with vegan certifications. This initiative encourages businesses to continuously improve their offerings, supports vegan start-ups, and communicates the awarded products and services to a wider audience, further promoting plant-based alternatives in Greece.

These initiatives, such as the consumers' survey, Vegan Life Festival, and Vegan Awards, contribute collectively to raising awareness, promoting the vegan lifestyle, and encouraging the adoption of plant-based alternatives in Greece. Through surveys, events, and recognition of vegan-friendly products and services, these strategies actively support and facilitate the growth of plant-based farming and consumption in the country, fostering a more sustainable and compassionate food culture.

5.2.3 Italy

In Italy, various promotional strategies are in place to encourage and support plant-based farming and consumption. These strategies can be categorised into two main groups: funding actions from the common agricultural policy, which aid in rural development and raising awareness initiatives by non-governmental entities.

At the regional level, the **Sicilian Rural Development Programme 2014-2022** has taken Measure 3.2 to heart. This initiative focused on information and promotion activities for quality products in the EU market. In 2023, a call for proposals will be published, offering a substantial budget of EUR 2.6 million. The aim is to support promotional strategies for plant-based agriculture production and quality products, including those with PDO, PGI, organic, and **Qualità Sicura** brands. This funding initiative will provide a 70% contribution for eligible projects submitted by protection consortia, associations, producer organisations, enterprise networks, and temporary associations. The eligible interventions may encompass various activities, such as supplying goods and services for information dissemination,

implementing promotional and advertising campaigns, conducting meetings with operators and buyers, and participating in shows, fairs, and events.

Moreover, vegan festivals are a popular way to raise awareness and encourage plant-based diets and consumption across different regions of Italy. Cities like Verona, Bergamo, Milan, Como, Ravenna, Mesero, Padova, and Ferrara organise these events, featuring conferences, workshops, and presentations that highlight the connection between plant-based food and its positive impact on health and climate change. Examples include the **Vegan Days** in Padova (3rd edition in 2017), **Vegan Festival** in Ferrara (7th edition), and **MiVeg Festival** Vegan in Milan (organised since 2013).

In the regional context of Sicily, specific events have been organised to promote plant-based diets and food sustainability. The 1st **Festival of Animal and Food Sustainability** in Enna (2019) was a remarkable initiative. Organised by the only vegan restaurant in the area, the Sustainability Ethics Committee, the association Veg Sicilia, and the tourist organisation "Pro Loco Enna," this five-day event featured scientific appointments, show cooking, performances, exhibitions, and testimonials from various fields. The festival aimed to raise awareness about ethical sensitivity, environmental protection, and the promotion of historical, cultural, and archaeological territories in Enna and Sicily, emphasising eco-sustainable and healthy nutrition.

Similarly, the **Vegan med fest** in Cefalu (Palermo, 2013) also left a significant impact. This three-day event comprised workshops, conferences, show cooking, documentary screenings, photographic exhibitions, artistic performances, and children-oriented laboratories. Its main focus was on plant-based diets, ethics, and ecology, contributing further to the promotion of sustainable and compassionate food choices in the region.

These initiatives, supported by various stakeholders at both the national and local levels, work together to create a dynamic environment for promoting plant-based farming and consumption in Italy. The combination of funding opportunities and awareness-raising events strengthens the commitment to sustainable and ethical food choices, leading the way towards a healthier and more environmentally friendly future.

5.2.4 Lithuania

The **Žalia pėda (Green Foot) Project** is an eco-education initiative in Lithuania that encourages children to create their own thematic one square metre gardens in educational establishments. The project aims to teach children about the growth process of plants, from seed to ripe fruit, while fostering a sense of creativity and responsibility towards the environment through gardening. The initiative is targeted at various Lithuanian educational institutions, including kindergartens, schools, orphanages, and day care centres. By engaging children in hands-on gardening activities, the project aims to develop a younger generation that is knowledgeable about and connected to nature.

Gamta mieste (Nature in Town) Events on Nature Education for children and adults organises experiential outdoor school activities focused on life skills and the food route for both children and adults. These events are based on non-formal education principles, providing interactive and hands-on learning experiences in nature. The goal is to educate participants about the importance of nature and sustainability while fostering a deeper understanding of the food production process. By connecting

people with nature in urban environments, Gamta mieste aims to promote environmental awareness and a sustainable lifestyle.

5.2.5 Spain

Spain still has a very meat based culinary tradition, but there are some initiatives, mainly around Barcelona and Madrid.

VEGAN FEST CATALUNYA which is promoted to be the biggest vegan open air festival of the world. It is a non profit festival kicked off by three persons and their families, friends and supporters. Under the supporters the producers of vegan food can be found.

There are international initiatives, like UK founded **VEGANUARY** who are opening up in Spain or **PRO VEG Spain** who is holding a subdomain under the PRO VEG international page, where articles translated to Spanish are promoted.

The **Vegetarian Union of Spain** provides the most elaborated page and support to vegans. It aims to promote plant based food and to normalise vegan options in Spanish society. They are running a website providing extensive information on the topic, a blog and an online shop.

5.3 Examples/practices of lifelong learning opportunities in the field of plant-based farming and consumption at European level

In Europe, lifelong learning opportunities in the field of plant-based farming and consumption are abundant, providing individuals with the knowledge and skills to contribute to sustainable food systems. One such opportunity is the event "Farming's got talent! Vocational education and training for agriculture in transition," which emphasises vocational training and lifelong learning to address sustainability challenges in the farming sector. Various courses and programs are also available, such as the "Plant-Based Foods & Proteins Course" in the Netherlands, focusing on alternative proteins and plant-based foods, and the "Online MOOC Plant-Based Diets: Food for a Sustainable Future" organised by Wageningen University & Research. These courses cover topics ranging from plant protein nutrition to the impact of food choices on global challenges.

The "Plant Based Academy" offers a range of comprehensive courses and training, including culinary art, nutritional science, and lifestyle medicine, all centred around plant-based diets. Universities, like

the University of Winchester in the UK, also provide specialised short courses for health professionals interested in incorporating evidence-based nutrition into clinical practice. Online platforms like the **"Good Food Institute"** offer open-access courses that delve into the science behind sustainable proteins, covering plant-based, fermentation-made, and cultivated meat production processes.

In addition to formal courses, workshops and events are instrumental in promoting plant-based farming and consumption. For example, the **"Safe Food Advocacy Europe"** organised stock-free organic farming workshops across Europe, raising awareness and building capacities among farmers in stock-free organic farming practices.

Furthermore, international projects and alliances contribute to European-level lifelong learning opportunities. The "EQVEGAN project" an EU Sector Skills Alliance, focuses on the plant-based sector, designing and offering innovative trainings for professionals and students to meet the growing consumer interest in plant-based diets and the vegan food industry.

Moreover, international organisations like the "Mediterranean Agronomic Institute of Bari (CIHEAM Bari)" offer master courses and advanced specialised courses in sustainable agriculture and natural resource management. While not exclusively plant-based, their programs encompass elements that contribute to more sustainable practices, including organic agriculture and minimising environmental impacts.

Lastly, projects like **"SOLINSA"** create networks to explore alternative approaches to sustainable agriculture and facilitate knowledge exchange between farmers, consumers, NGOs, and experts. The project produces country reports and case studies on successful initiatives, inspiring stakeholders and promoting sustainable agriculture practices.

These diverse lifelong learning opportunities collectively contribute to raising awareness, enhancing knowledge, and fostering a more sustainable and compassionate approach to plant-based farming and consumption across Europe.

5.4 Examples/practices of lifelong learning opportunities in the field of plant-based farming and consumption at National/Local level

5.4.1 Slovenia

The Agriculture, Agronomy, and Horticulture program offered by the Biotechnical Faculty at the University of Ljubljana in Slovenia provides lifelong learning opportunities in the field of plant-based farming and consumption. This program focuses on equipping students with the necessary knowledge and skills for sustainable agriculture practices. Through specialised courses, practical experiences, and research opportunities, students are prepared to address the challenges of plant-based farming and promote sustainable agricultural practices. Collaborations with stakeholders further enhance the practical learning experience, allowing students to engage with real-world issues and contribute to positive change in the field.

The Slovenian Vegan Society serves as an exemplary practice of lifelong learning opportunities in the field of plant-based farming and consumption in Slovenia. Their website provides a comprehensive platform for individuals to access a wealth of resources related to plant-based lifestyles and sustainable agriculture practices. The website offers articles, recipes, educational materials, and information on various aspects of plant-based diets and their benefits. It serves as a hub for continuous learning, providing individuals with the knowledge and guidance needed to adopt and maintain a plant-based lifestyle. By fostering a supportive community and providing valuable educational material, the Slovenian Vegan Society contributes to expanding knowledge and skills in the field of plant-based farming and consumption, ultimately promoting a more sustainable and compassionate world.

5.4.2 Greece

The Hellenic Vegetarians Association (HellasVeg) in Greece provides lifelong learning opportunities in the field of plant-based farming and consumption through various activities. They organise free webinars focused on plant-based foods and diets, with a particular emphasis on the environmental and health aspects of a plant-based diet. These webinars provide valuable information and insights to participants. Additionally, HellasVeg distributes a weekly newsletter to its members, featuring news articles related to the plant-based front, keeping members updated on the latest developments in the field.

Several vocational education institutes and individual professionals, such as nutritionists, offer seminars and courses on vegetarian and vegan cooking and nutrition in Greece. These educational opportunities provide individuals with the knowledge and skills to prepare plant-based meals and understand the nutritional aspects of a plant-based diet. Participants can learn about recipe development, meal planning, and the health benefits associated with plant-based eating.

The Biocyclic Park, a member of the **Panhellenic Biocyclic Vegan Network**, plays a significant role in promoting lifelong learning opportunities in plant-based farming in Greece. The Biocyclic Park offers training and consultation services to farmers throughout Greece who wish to transition to plant-based farming by adopting the guidelines and techniques of the Biocyclic Vegan Standard and obtaining certification. They have a team of specialised agronomists who provide guidance and support in implementing biocyclic vegan agriculture practices.

Collaborating with organisations like **SAFE** (**Safe Food Advocacy Europe**) and BNS Biocyclic Network Services, the Biocyclic Park also holds seminars on various topics related to plant-based farming. These seminars are designed for farmers, students, and professionals and cover areas such as composting, natural resource management, biodiversity, and more. By providing these training opportunities, the Biocyclic Park contributes to the dissemination of knowledge and skills necessary for successful plant-based farming practices in Greece.

5.4.3 Italy

Lifelong learning opportunities in plant-based farming and consumption in Italy are provided by both official educational institutions and external organisations. At the **University of Palermo**, Italy, students can enrol in the "Organic Agriculture" course offered within the **degree program in Agricultural Science and Technology**. This three-year course focuses on organic farming techniques and equips graduates with multidisciplinary skills in managing agricultural models, including aspects of plant-based agriculture such as "**Agricultural ecology**" and "**Organic horticulture**."

In the regional context of Sicily, **Slow Food Palermo** and **Slow Food Sicily**, affiliated with the Slow Food Foundation for Biodiversity, actively promote sustainable agricultural practices and biodiversity. Slow Food Palermo organises various events and initiatives to raise awareness about food culture, biodiversity, and environmental issues. One notable example is the "**Bio in Sicily**" event, which brings together stakeholders involved in agribusiness, sustainable tourism, food and wine, and the circular economy. Within the framework of this event, plant-based agriculture is highlighted as an integral part of promoting a sustainable economic system, protecting biodiversity, and encouraging healthy lifestyles.

Accademia Bio, managed by FederBio Servizi, also plays a significant role in offering training courses in organic farming. Collaborating with universities, training organisations, and agri-food companies, Accademia Bio provides comprehensive training for the organic sector. Their courses cover various topics related to organic production, with a specific focus on plant-based agriculture. For instance, the "Expert in organic production" course emphasises the principles and rules of organic plant-based production. While they also offer courses related to animal husbandry and animal product production, Accademia Bio provides valuable training opportunities specifically dedicated to plant-based farming enterprises.

These educational institutions and organisations in Palermo and Sicily contribute significantly to lifelong learning opportunities in the field of plant-based farming and consumption. Through formal education programs, seminars, and courses, they promote organic and sustainable agriculture practices, biodiversity protection, and the adoption of plant-based agriculture and sustainable food systems. Their combined efforts support the advancement of environmentally friendly and ethically conscious farming practices, fostering a healthier and more sustainable food culture in Italy.

5.4.4 Lithuania

While specific examples or practices of lifelong learning opportunities in the field of plant-based farming and consumption at the local level may not be readily available, it's important to note that many training programs and agricultural education initiatives do include a component related to

plant-based production. For instance, the "Competence development training programs for young farmers" offered by organisations like LITFOOD in Lithuania cover various aspects of agriculture, including plant-based farming.

These programs typically encompass subjects such as integrated support requirements, agri-environment and landscape improvement, environmental protection and fertiliser planning, economic planning and financing options. While there may be optional training courses dedicated to livestock or crop production, the core curriculum often addresses plant-based agriculture as an essential component of overall agricultural practices.

Although specific examples focused solely on plant-based farming and consumption may not be identified, it's important to recognize that plant-based agriculture is an integral part of general agricultural training programs and courses. These opportunities aim to provide comprehensive knowledge and skills to farmers, including those engaged in plant-based farming, to promote sustainable and environmentally friendly practices in agriculture.

5.4.5 Spain

One practical example is the Agricultural School of Cuevas del Becerro in the Province of Malaga; There 17 students at a time learn in hands-on training about production of healthy food. It is a cooperation of the municipality, organisation la Noria and the Caixa Foundation which shall teach them how to grow their own healthy food at low costs.

More people can be reached by the aforementioned initiatives of the educational department of the Andalusian government, as they design campaigns like the school gardens and Fruit Buses which are then implemented in schools all over the country.

6. Challenges

6.1 Identified problems/challenges in the field of promotion of plant-based farming and consumption

The promotion of plant-based farming and consumption faces numerous challenges and problems, which have been identified in different countries and can be seen as shared obstacles within the

context of this joint report. While each country presents its unique set of challenges, there are notable similarities that underline the common issues faced in promoting plant-based diets.

A prevalent challenge, common in all EU countries, is the lobbying against plant-based alternatives to animal products, attempted by certain market players with vested interests at national and EU levels. This lobbying against plant-based alternatives usually focuses on restricting the marketing of these products, and has resulted in amendments to the EU regulations prohibiting the use of terms like "vegan cheese" or "oat milk", or like Amendment 2020/171 that seeks to prohibit "imitation or evocation" of dairy products and could result in bans on plant-based food packaging that looks visually similar to dairy foods (e.g. packaging for plant-based desserts that resemble a yoghurt pot). These restrictions to marketing plant-based alternatives to animal products place serious obstacles to their wider promotion and integration to the diets of consumers at European level.

Insufficient financial support and limited funding sources also pose significant challenges. This includes the lack of financing for key components like mature compost and humus, as well as inadequate incentives to encourage farmers to adopt plant-based farming practices. Limited financial resources hinder the transition to plant-based alternatives and impede the necessary investments in infrastructure and research.

Education and knowledge gaps play a vital role in inhibiting the promotion of plant-based diets. The absence of plant-based farming in curricula and the lack of training programs for farmers and experts prevent the dissemination of knowledge and hinder the development of necessary skills. Moreover, misconceptions about the cost of plant-based diets persist, with many perceiving them to be more expensive than animal-based diets. Insufficient campaigns and educational initiatives further contribute to the lack of awareness about the health and climate benefits of plant-based products.

Cultural factors also play a significant role in the challenges faced. Deeply rooted traditions and dietary habits make it difficult to shift away from animal-based products. Social stigmas and marginalisation faced by farmers who adopt alternative methods can further impede progress. Additionally, prevailing short-term production mind sets and the attachment to traditional foods in certain cultures create resistance to change.

While these challenges are evident in different countries, the nuances and contexts may vary. For instance, the lack of specific recognition and support for plant-based farming at both European and national levels is a shared challenge, but the specific legislative and funding gaps differ among countries. Similarly, the influence of the Common Agricultural Policy (CAP) of the European Union can be seen across countries, but its impact and prioritisation may vary.

To address these challenges effectively, collaborative efforts are required. This entails establishing clear terminology that allows for easy identification of plant-based alternatives, securing adequate financing and funding sources, changing farming frameworks to prioritise sustainable practices, and bridging education and knowledge gaps through comprehensive training programs. Additionally, challenging social stigmas, promoting inclusive messaging, and increasing the availability of plant-based options in the market are essential steps.

Developing supportive policies and funding mechanisms specific to plant-based farming, promoting educational campaigns to increase knowledge and awareness among consumers, addressing misconceptions about cost, and fostering social acceptance are crucial for overcoming the challenges.

Engaging various stakeholders, including organisations, NGOs, policymakers, and the public, is necessary to create an environment that supports sustainable and compassionate food choices and drives the growth of the plant-based market on a broader scale.

6.2 Identified problems/challenges in the field of lifelong learning opportunities of plant-based farming and consumption

The challenges and problems identified in the field of lifelong learning opportunities for plant-based farming and consumption are not unique to specific countries but are shared among them, as outlined in this joint report. While each country has its distinct context, there are notable commonalities that highlight the widespread obstacles faced in promoting lifelong learning in this domain.

Slovenia, Greece, Italy, and Lithuania face similar challenges in learning opportunities about plant-based farming and consumption. These challenges include limitations in local initiatives due to small population sizes, lack of awareness and knowledge about the benefits of plant-based diets, and limited access to specialised education and training programs. Resistance to change, influenced by cultural and historical factors, is another shared obstacle, as traditional farming practices and dietary habits create reluctance to embrace plant-based methods and diets.

The absence of supportive policies and infrastructure dedicated to plant-based farming and consumption hampers the establishment and sustainability of lifelong learning initiatives in all countries. The need for clear guidelines, funding opportunities, and infrastructure development is crucial to foster an enabling environment for lifelong learning in this field.

In Greece, there is a specific need to organise recorded and scientifically reliable training material into comprehensive programs to offer lifelong learning opportunities to a wider audience. The limited demand for lifelong learning in plant-based farming is attributed to inadequate promotion and awareness, while the non-integration of the plant-based approach into official training and educational curricula adds to the challenges.

Italy faces challenges related to the perceived lack of relevance and limited focus on training in the field of plant-based farming and consumption. In contrast to biological and organic farming, where there are strong networks of producers and technicians at national level (such as AIAB), in plant-based agriculture there is a lack of efforts to create learning and knowledge-sharing opportunities. Beyond the marginal content included in formal education curricula at universities, learning opportunities from independent and private entities are few and far between, are not sufficiently publicised, and are aimed at a niche group of specialised technicians. This limited exposure and integration of plant-based

concepts in formal and non-formal education also undermines the effects of initiatives that seek to promote a change in consumption habits and farming models and practices.

In Lithuania, challenges include inadequate opportunities within the current education system, limited focus on plant-based alternatives in conventional education, and the need for continuous learning to keep up with advancements. Investment in dedicated educational programs, collaboration between institutions and organisations, and leveraging digital platforms are vital to empower individuals with the skills and knowledge necessary for success in plant-based agriculture and to expand lifelong learning opportunities.

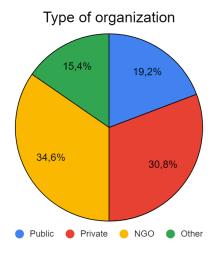
In Spain the majority of resources is either from public administration of the agricultural or educational sector. In regards to the target group mostly children and schools are addressed. This assures a high reach out to education professionals and families, but to reach a real change in society a bigger variety in addressing more age groups could be more effective. On a private level there are some initiatives but they cannot be seen as presentative on a national level.

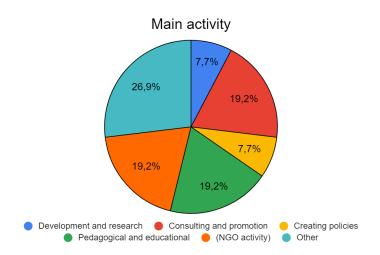
By acknowledging these shared challenges and fostering collaborative efforts, countries can work together to address the gaps and create a supportive environment for lifelong learning in plant-based farming and consumption. Sharing resources, expertise, and promoting inclusive and accessible educational programs will contribute to the growth and development of sustainable agriculture and plant-based food systems.

7. Online surveys results for organisations

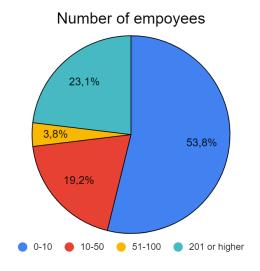
The research of plant-based farming and consuming terminology and practices was researched with online surveys, where the main aim was to include relevant organisations and representatives somehow included in the agricultural and educational sector that could provide some relevant information and on field information of the actual state of familiarity of stakeholders with the term plant-based and how actual participant see it. The goal was to see if participants see this as something they have never heard of, if this is something connected to vegan lifestyle or if they understand it as a beneficial new practice and potential of implementation into their lifestyle, where they see potential challenges and if they agree more initiatives should be done in this direction.

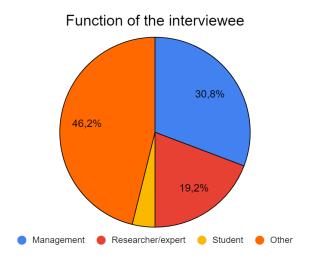
The participating organisations encompassed a mix of public, private, NGOs, and others. The majority (9) were NGOs, followed by private organisations (8), and public entities (5). In terms of the field of activity, the organisations were involved in a range of sectors, with consulting and promotion (5) and pedagogical and educational activities being the most prominent areas.





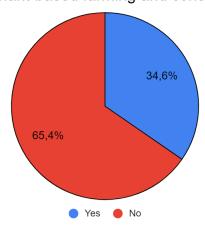
The organisations varied in size, with 14 organisations having 0-10 employees, while six organisations had 201 or more employees. In terms of positions, the majority consisted of management personnel (8), followed by researchers/experts (5) and individuals with diverse roles (12). Only one participant identified as a student.





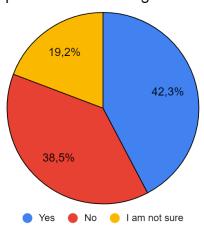
The survey assessed whether the organisations had produced any promotional material on plant-based farming and consumption. Approximately 35% of the organisations (9 out of 26) had created promotional material on the subject.

Has your organisation developed any promotional material on the topic of plant-based farming and consumption?

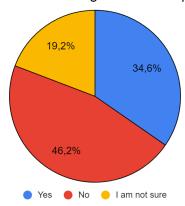


Regarding awareness of local, national, or European strategies/policies promoting sustainable plant-based consumption, 42% were aware of such initiatives, while 38% were not sure (10 out of 26).

Are you aware of any local, national or European strategy/policy to promote sustainable plant-based farming and consumption?



Do you know any local, national, or European campaign/action to promote plant-based farming and consumption?



When asked about the barriers to promoting plant-based farming and consumption, the organisations identified various challenges:

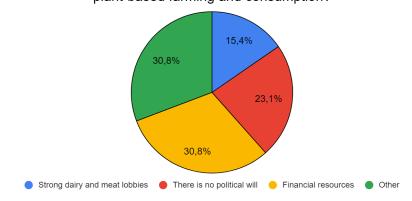
<u>Strong dairy and meat lobbies</u>: 15% of organisations mentioned the influence of powerful lobbies as a significant obstacle.

<u>Lack of political will</u>: 23% of organisations cited the absence of political support as a barrier.

<u>Financial resources</u>: 31% of organisations perceived financial constraints as a challenge.

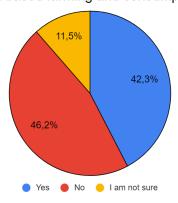
Other: 31% of organisations identified additional, unspecified barriers.

In your opinion, what are the biggest problems/obstacles to greater promotion of plant-based farming and consumption?

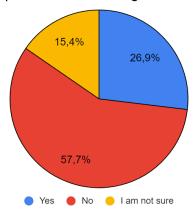


Approximately 42% of organisations (11 out of 26) were aware of examples of lifelong learning in the field of plant production and consumption. However, 46% (12 out of 26) were not aware of any such opportunities, while around 12% were unsure.

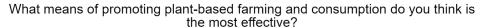
Do you know any example of lifelong learning in the field of plant-based farming and consumption?

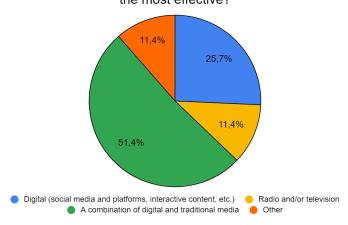


Do you think there are enough opportunities for lifelong education in the field of plant-based farming and consumption?



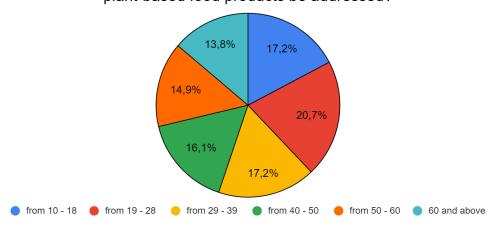
Regarding effective measures to promote plant-based farming and plant-based consumption, a combination of digital and traditional media received overwhelming support from the organisations, with 18 organisations considering it the most effective approach. Social media, interactive content and digital platforms were identified as powerful tools for raising awareness.





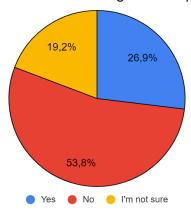
The survey asked the organisations about the target age group for promoting plant-based food products. The majority believed that age groups ranging from 10 to 50 should be targeted, with the highest percentage of responses (18) falling in the 19-28 age group.

In your opinion, to which age group should the promotion of plant-based food products be addressed?



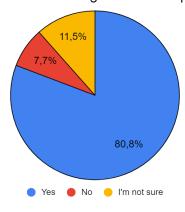
Regarding the consistency of plant-based farming and consumption with the current national agricultural production strategy, 27% of organisations were uncertain (7 out of 26), while 54% expressed doubt (14 out of 26).

Do you think that plant-based farming and consumption are consistent with the current national agricultural production strategy?

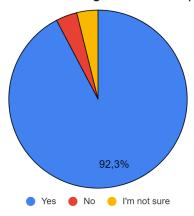


A significant majority of organisations (81%) believed that both the EU (21 out of 26) and the state (24 out of 26) should strengthen the promotion of plant-based farming and consumption.

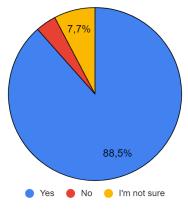
Do you think that the EU should strengthen the promotion of plant-based farming and consumption?



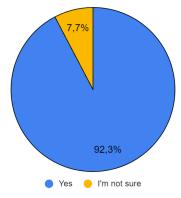
Do you think that the state should strengthen the promotion of plant-based farming and consumption?



Do you think that the EU should strengthen opportunities for lifelong learning in the field of plant-based farming and consumption?

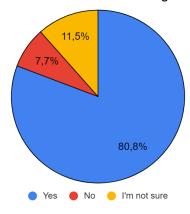


Do you think that the state should strengthen opportunities for lifelong learning in the field of plant-based farming and consumption?

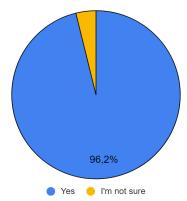


Most organisations recognized the potential of plant-based farming and consumption to contribute to sustainable agriculture. A substantial 81% (21 out of 26) agreed that it reduces the carbon footprint, while 96% (25 out of 26) believed it increases local production and reduces the need for imported food.

Do you think that plant-based farming and consumption contribute to sustainable agriculture in terms of reducing the carbon footprint?

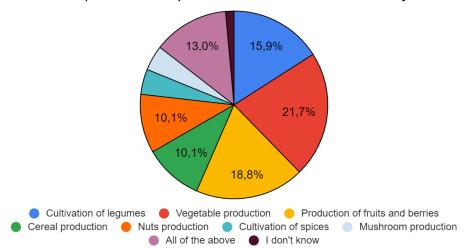


Do you think that plant-based farming and consumption increase local production and reduce the need for imported food?



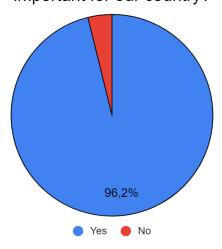
When asked about preferred plant-based production in their area, the organisations showed diverse interests, with vegetable production (15) and cultivation of legumes (11) receiving significant support.

What kind of plant-based production should increase in your area?



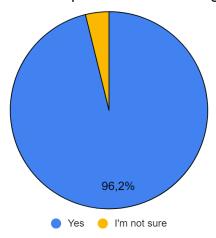
An overwhelming majority of organisations (96%) believed that plant-based farming and consumption are important for their country.

Do you think that plant-based farming and consumption are important for our country?



A significant majority (96%) of organisations expressed support for formulating a national strategy for the promotion of plant-based farming and consumption.

Do you think that at the national level we should formulate our own strategy for the promotion of plant-based farming and consumption?

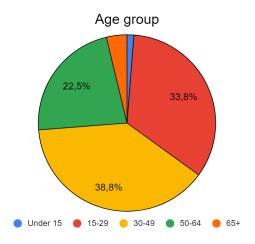


The survey results from organisations demonstrate a widespread recognition of the importance and benefits of plant-based farming and consumption. However, they also highlight the need to address barriers, such as financial constraints and the influence of certain lobbies. The overwhelming support for lifelong learning opportunities and strategies to promote plant-based agriculture underscores the potential for transformative change at both national and European levels. By leveraging effective promotional measures and targeting diverse age groups, organisations can play a pivotal role in driving the transition towards a more sustainable, ethical, and plant-powered future.

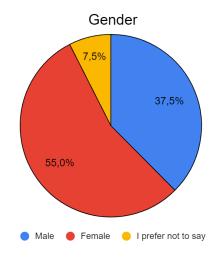
8. Online surveys results for individual respondents

Online surveys were shared to individual respondents to identify the knowledge gap and understanding on the topic of plant based farming and consumption and sustainable practices in general. The participants invited were somewhat included in the sector of agriculture, whether as educators, employees, self employed farmers or students.

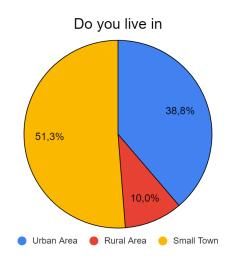
The majority of respondents fell between the ages of 15 and 49, with 27 participants in the 15-29 age group and 31 in the 30-49 age groups. A notable proportion of respondents were in the 50-64 age group (18), while respondents aged 65 and above were fewer (3).



The respondents comprised 44 females and 30 males. Additionally, six respondents preferred not to disclose their gender.

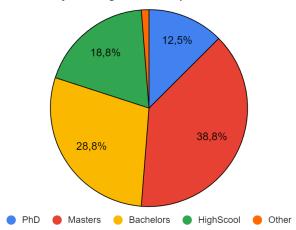


The majority of respondents (41) lived in small towns, followed by 31 in urban areas, and 8 in rural areas.



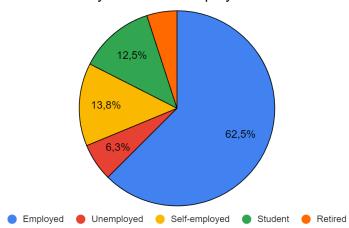
The respondents' educational backgrounds varied, with 31 holding a Master's degree, 23 having a Bachelor's degree, 15 completing high school, and 10 possessing a PhD. One respondent had other qualifications.

What is your highest completed education

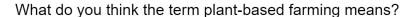


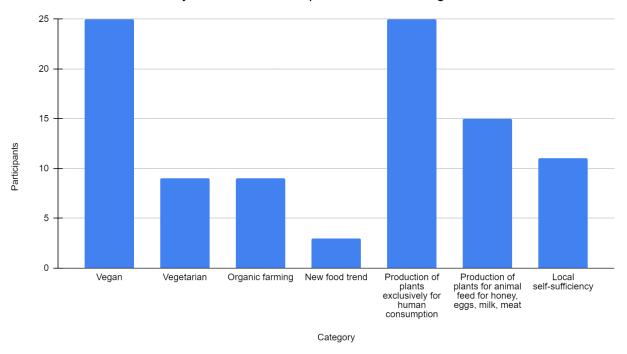
The majority of respondents (50) were employed, while 11 were self-employed, 10 were students, five were unemployed, and four were retired

What is your current employment status



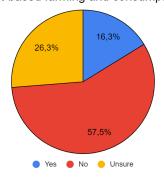
The survey assessed the understanding of the term "plant-based." While 25 of respondents correctly identified it as the production of plants exclusively for human consumption, 25 associated it with veganism, 9 with vegetarianism, and 9 with organic farming. Furthermore, some respondents perceived it as a new food trend (3) or related to the production of plants for animal feed and animal products (15). The findings suggest a need for clearer communication to establish a consistent understanding of the concept.



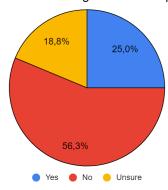


Regarding local, national, and European strategies and campaigns to promote plant-based farming and consumption, the survey indicated that around 57% of respondents were not aware of any such initiatives. Only around $\frac{1}{4}$ or less confirmed awareness of these strategies, while $\frac{1}{4}$ were unsure. This highlights the importance of increasing awareness and communication about existing efforts and future initiatives in this field.

Are you aware of any local, national or European strategy/policy to promote plant-based farming and consumption?



Do you know any local, national, or European campaign/action to promote plant-based farming and consumption?



The survey respondents identified several obstacles to the greater promotion of plant-based farming and consumption:

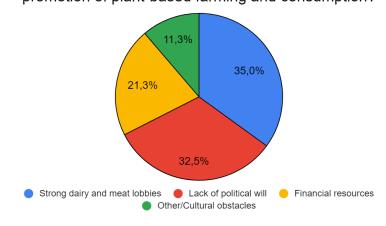
<u>Strong Dairy and Meat Lobbies</u>: The influence of powerful dairy and meat lobbies was perceived as a significant obstacle by (35%) of respondents.

<u>Lack of Political Will</u>: A considerable (32%) of respondents believed that the lack of political will hinder the promotion of plant-based agriculture.

<u>Financial Resources</u>: (21%) of respondents viewed limited financial resources as a constraint in encouraging plant-based farming and consumption.

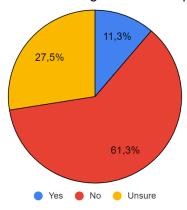
Other/Cultural Obstacles: Some respondents (11%) mentioned unspecified cultural obstacles or other barriers.

In your opinion, what are the biggest problems/obstacles to greater promotion of plant-based farming and consumption?

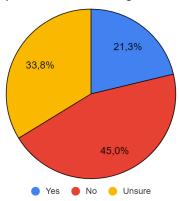


The survey explored the awareness of lifelong learning opportunities related to plant-based farming and consumption. Nine respondents confirmed knowledge of such opportunities, while 49 were not aware, and 22 were unsure. This indicates potential for enhancing education and outreach in the field.

Do you know any example of lifelong learning in the field of plant-based farming and consumption?

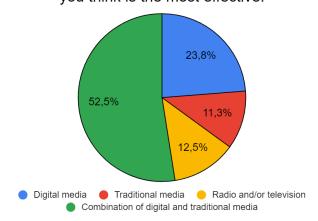


Do you think there are enough opportunities for lifelong education in the field of plant-based farming and consumption

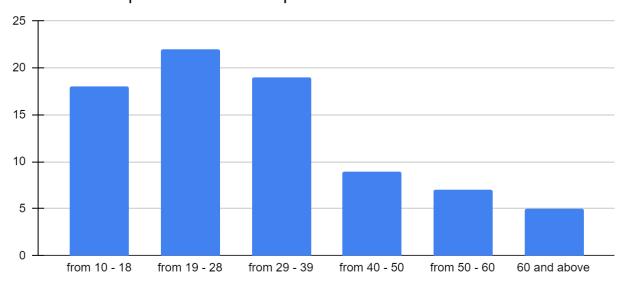


Respondents believed that a combination of digital and traditional media (52%) would be the most effective means of promoting plant-based farming and consumption. Additionally, respondents identified age groups between 10 and 39 as the primary target audience for such promotions, with the highest number of respondents falling within the 19 - 28 age group (22).

What means of promoting plant-based farming and consumption do you think is the most effective:

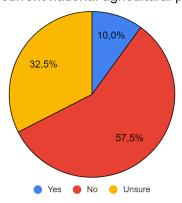


In your opinion, to which age group should the promotion of plant-based food products be addressed:

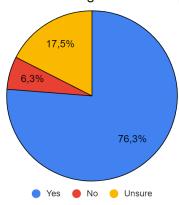


A significant majority of respondents expressed support for both the EU (86%) and their country's government (81%) to strengthen the promotion of plant-based farming and consumption. This data underscores the importance of governmental involvement in shaping policies and initiatives to encourage sustainable and ethical agricultural practices.

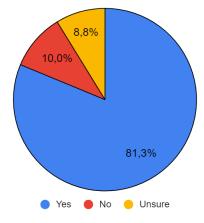
Do you think that plant-based farming and consumption are consistent with the current national agricultural production strategy?



Do you think that the EU should strengthen the promotion of plant-based farming and consumption?



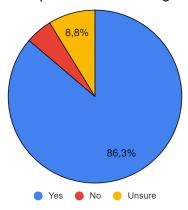
Do you think that the state should strengthen the promotion of plant-based farming and consumption?



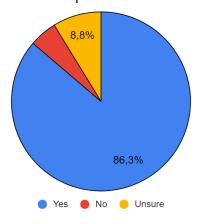
The positive perception of plant-based farming and consumption's contributions to sustainable agriculture is evident, with 86% of respondents believing they reduce the carbon footprint and increase local production. Moreover, the same number of respondents agreed that plant-based

agriculture could significantly increase the country's self-sufficiency in food production and reduce the reliance on imports.

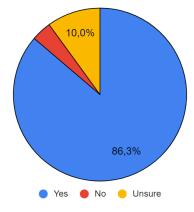
Do you think that the EU should strengthen opportunities for lifelong learning in the field of plant-based farming and consumption?



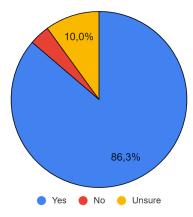
Do you think that the state should strengthen opportunities for lifelong learning in the field of plant-based farming and consumpti...



Do you think that plant-based farming and consumption contribute to sustainable agriculture in terms of reducing the carbon footprint?

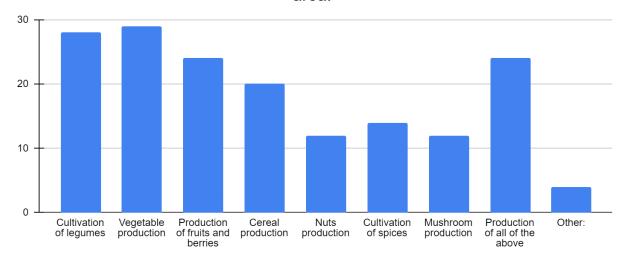


Do you think that plant-based farming and consumption increase local production and reduce the need for imported food?

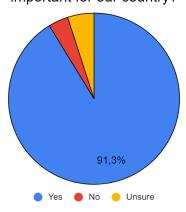


Regarding preferred plant-based production, respondents expressed interest in various areas, with vegetable production (29) and the cultivation of legumes (28) leading the choices. This insight can guide the development of targeted initiatives to boost specific sectors of plant-based agriculture.

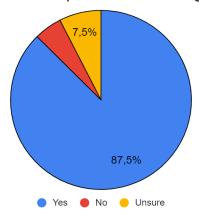
In your opinion what kind of plant-based production should increase in your area:



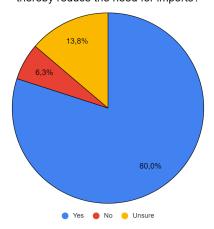
Do you think that plant-based farming and consumption are important for our country?



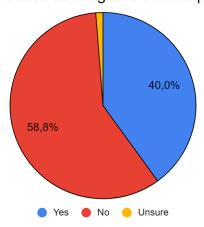
Do you think that at the national level we should formulate our own strategy for the promotion of plant-based farming and consumption?



Do you think that with plant-based farming and consumption, we can significantly increase the self-sufficiency of the country in the field of self-produced food and thereby reduce the need for imports?



Have you ever noticed any promotional material on the topic of plant-based farming and consumption?



In conclusion, the survey results reflect a moderate level of awareness and understanding of plant-based farming and diets. Respondents demonstrate support for promoting plant-based agriculture and consumption at both national and EU levels. However, addressing obstacles such as the influence of meat and dairy lobbies and the lack of political will, while promoting lifelong learning and education, are critical to further accelerate the transition to plant-based practices.

By utilising a combination of digital and traditional media, governments and organisations can effectively engage different age groups and foster a healthier, more environmentally conscious society. Plant-based farming and diet hold the potential to revolutionise agriculture, mitigate environmental impacts, improve animal welfare, and promote public health. Embracing this sustainable paradigm shift is not only essential for the well-being of the planet but also offers exciting opportunities for a greener, more compassionate future.

9. Conclusion

The research conducted by the project partners aimed to identify existing policies, stakeholders, and examples related to the promotion of plant-based farming and consumption, as well as lifelong learning opportunities in this field. Through a thorough literature review, desk research, surveys, and interviews, the project team was able to gather relevant and up-to-date information on the subject matter.

The findings of the research indicate that there is a lack of initiatives on all levels for both the promotion of plant-based farming and consumption and lifelong learning opportunities on plant-based farming and consumption. While some policies and initiatives exist at the national and EU levels with the aim of similar goals on sustainability and environmental practices, they are often fragmented and

lack coordination or missing the involvement of plan-based farming practices and consumption promotion strategies or lifelong learning opportunities on this topic. Moreover, there is a lack of awareness and understanding among stakeholders regarding the benefits of plant-based farming and consumption, as well as the opportunities for lifelong learning in this field as well a lack of understanding the terminology of what it means to refer to "plant-based" farming or consumption and differentiating this from veganism like lifestyles to prevent misunderstanding or mental resistance to the topic.

Promoting plant-based farming and consumption faces common challenges across different countries and regions. These challenges include limited awareness and knowledge among the public, resistance to change due to cultural and traditional practices, lack of comprehensive educational resources and training programs, and limited policy support and infrastructure. However, efforts are being made at various levels to address these challenges and promote plant-based agriculture and consumption.

One of the main challenges is the limited awareness and knowledge among the general public regarding the benefits of plant-based diets and sustainable agriculture. Traditional dietary practices and cultural attachments to certain food items can make it difficult to introduce and promote plant-based alternatives. This highlights the importance of education and awareness campaigns to inform and educate individuals about the positive impact of plant-based farming and consumption on their health, the environment, and animal welfare.

Another challenge is the resistance to change, which is influenced by long-standing cultural and traditional practices. In many countries, meat and dairy products have been deeply ingrained in the culinary traditions and dietary habits of the population. Overcoming this resistance requires targeted educational initiatives that engage and involve individuals in the transition towards plant-based diets. By providing information about the environmental and health benefits, as well as offering practical guidance on how to adopt plant-based alternatives, individuals can be empowered to make informed choices and embrace sustainable food systems. It is important to note that this should be done in a sensitive and non-aggressive manner not to reach the opposite effect of backlash and not to reach the opposite effect of polarising society.

Furthermore, the lack of comprehensive educational resources and training programs focused on plant-based farming and consumption poses a significant obstacle for individuals seeking to pursue careers or expand their knowledge in this field. Conventional educational institutions often prioritise conventional farming methods, with minimal emphasis on plant-based alternatives. This lack of specialised courses and programs inhibits the development of a skilled workforce in the field of plant-based agriculture. It is crucial to invest in the creation of dedicated educational programs, vocational training courses, and workshops that provide individuals with the necessary skills, techniques, and knowledge to excel in this growing sector.

One of the key similarities identified was the lack of consensus on a common term for plant-based farming and consumption. While some countries use terms like "vegetarian" or "vegan," others use terms like "flexitarian" or "reducetarian." This lack of consensus can create confusion and hinder efforts to promote plant-based farming and consumption. Policy support and infrastructure are also critical in promoting plant-based farming and consumption. Governments play a crucial role in creating an enabling environment through supportive policies, funding initiatives, and the establishment of regulatory frameworks that encourage the adoption of plant-based practices. This includes incentives for farmers to transition to plant-based farming methods, such as financial support,

technical assistance, and access to markets. Additionally, investing in research and development to advance sustainable agricultural practices and improve the availability and affordability of plant-based products is essential. Collaboration between academic institutions, industry professionals, and organisations is paramount in creating and expanding lifelong learning opportunities in plant-based farming and consumption. By pooling resources, expertise, and experiences, stakeholders can foster a supportive environment that encourages innovation, knowledge sharing, and continuous improvement in the field. This collaboration can also lead to the development of comprehensive educational materials, training programs, and certifications that meet the needs of individuals interested in plant-based farming and consumption.

Furthermore, the use of digital platforms and online resources can enhance the accessibility of educational materials and lifelong learning opportunities. Open educational resources, webinars, online courses, and virtual communities provide individuals from diverse backgrounds and geographical locations with the ability to participate in lifelong learning experiences. These digital platforms facilitate knowledge exchange, networking, and collaboration among learners, educators, and industry professionals.

The survey data reveals valuable insights into plant-based farming and consumption. It shows a diverse mix of participating organisations, highlighting the prevalence of NGOs. The findings emphasise the need to address barriers, such as powerful lobbies and financial constraints. The positive perception of plant-based practices and the call for government support underscore the potential for transformative change. By leveraging effective promotional strategies and targeting diverse age groups, we can drive a more sustainable, ethical, and plant-powered future.

Overall, the Com4AgriPlant project represents an important step towards promoting sustainable and healthy food systems by encouraging plant-based farming and consumption. While there are several challenges to overcome, the project team's comprehensive research approach provides a strong foundation for developing effective solutions that address the specific needs of stakeholders in each country. By promoting lifelong learning opportunities and empowering adult educators, counsellors, and lecturers with valuable resources and knowledge, the project aims to create a multiplier effect that reaches a broader audience. This approach recognizes that promoting plant-based farming and consumption requires a multi-stakeholder effort that involves policymakers, industry professionals, educators, and consumers.

10. References

Asociación Empresarial para la Protección de las Plantas - Aepla. Available at: https://blog.aepla.es

A very short history of organic farming in Europe. (2019). Available at: https://console-project.eu/blog/2021/09/02/history-of-organic-farming-in-europe/

Agroecology Greece. Available at: https://www.agroecology.gr/

Bevo d.o.o. (2019). Available at: https://www.juicymarbles.com/eu

Biocyclic Vegan Standard. BNS Biocyclic Network Services Ltd. (2022). Available at: https://www.biocyclic-vegan.org/partners/the-biocyclic-vegan-standard/

Campaigns for Nutrition and physical activities by the ministry of consumption. Available at: https://www.aesan.gob.es/AECOSAN/web/nutricion/campanyas/listado/aecosan_listado_campany as nutricion.htm

Centre for Consumers Protection. Available at: https://kepka.org/mainmenu-2

Centre for Health Education and Disease Prevention. "Why is it healthy to eat vegetables?". (2011). Available at: http://www.smlpc.lt/index.php?sid=145&tid=754

Compassion in World Farming. Available at: https://www.ciwf.eu/

Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32007R0834

Disadvantages and benefits of mono-cropping in the context of the environment. GeoPard Agriculture. (2023). Available at:

https://geopard.tech/blog/disadvantages-and-benefits-of-monocropping-in-the-context-of-the-environment/

European Alliance for Plant-based Foods. (2020). Available at: https://plantbasedfoodalliance.eu/

European Code Against Cancer, World Health organisation. Available at: https://cancer-code-europe.iarc.fr/index.php/en/

European Commission, Agriculture and rural development (2022). Farming's got talent! Vocational education and training for agriculture in transition. Available at:

https://agriculture.ec.europa.eu/events/farmings-got-talent-vocational-education-and-training-agriculture-transition-2022-11-24

European Commission, Agriculture and rural development. (2022). Available at: https://agriculture.ec.europa.eu/common-agricultural-policy/cap-overview

European Commission, Agriculture and rural development. Available at: https://agriculture.ec.europa.eu/common-agricultural-policy/market-measures/promotion-eu-far m-products

European Commission, Directorate-General for Agriculture and Rural Development (2022). Available at:

https://agriculture.ec.europa.eu/news/increased-training-advice-and-innovation-projects-eu-farmers-2014-2020-thanks-common-agricultural-2022-05-02

European Environmental Bureau (2018). Available at: www.eeb.org

European Food Information Council (2023). Available at: https://www.eufic.org/en/

European Food Safety Authority. Available at: https://www.efsa.europa.eu/ (accessed June 2023)

European Plant-based Foods Association (2022). Available at: https://ensa-eu.org/

EUROPEAN RESEARCH EXECUTIVE AGENCY (REA). AGRIP-SIMPLE-2023. Promotion of Agricultural Products (AGRIP SIMPLE). (2023). Available at: call-fiche_agrip-simple-2023_en.pdf (europa.eu)

European R&I partnership on agroecology living labs and research infrastructures, 2023-2024. Available at:

https://research-and-innovation.ec.europa.eu/research-area/agriculture-forestry-and-rural-areas/ecological-approaches-and-organic-farming/partnership-agroecology_en

European Vegetarian Union. Available at: https://www.euroveg.eu/

Farm to Fork Strategy: For a fair, healthy and environmentally friendly food system. Available at: https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy_en

Food and Agriculture organisation of the United Nations (2018). The future of food and agriculture – Alternative pathways to 2050. Summary version. Available at: www.fao.org/3/I8429EN/i8429en.pdf

Food and Agriculture organisation of the United Nations (2022). Thinking about the future of food safety – A foresight report. Available at: https://www.fao.org/3/cb8667en/cb8667en.pdf

Fruit and vegetable promotion initiative. World Health organisation. (2003). Available at: https://apps.who.int/iris/handle/10665/68395

Good Food Institute (2023). Online course: The science behind alternative proteins. Available at: https://gfi.org/resource/plant-based-and-cultivated-meat-online-course/

Good Food Institute Europe. Available at: https://gfieurope.org/

Greenpeace European Unit (2023). Available at: https://www.greenpeace.org/eu-unit/

Grow Green, The Vegan Society, and Safe Food Advocacy Europe. Supporting sustainable plant-based production in the EU. Available at:

https://www.vegansociety.com/take-action/campaigns/grow-green

Hellenic Vegetarians Association. Available at: www.hellasveg.gr

Humane Society International (2023). Available at: https://www.hsi.org/

Impossible Foods. Available at: https://impossiblefoods.com/

Intergovernmental Panel on Climate Change (IPCC) (2019). Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. Available at: https://www.ipcc.ch/srccl/

Is being vegan a choice "for the rich"? VeganOK. (2023). Available at: https://www.veganok.com/vegan-budget/

Juicy Marbles. Available at: https://www.juicymarbles.com/

La agroescuela de Cuevas del Becerro: comer sano y barato es possible. Málaga Hoy. (2022). Available at:

https://www.malagahoy.es/provincia/Comer-sano-barato-posible-agroescuela-Cuevas-Becerro_0_1 658234773.html

Law proposal 140, 17th legislature. Italian Senate. (2013). Available at: https://www.senato.it/leg/17/BGT/Schede/Ddliter/39441.htm

List of potential AGRICULTURAL PRACTICES that ECO-SCHEMES could support. Available at: https://agriculture.ec.europa.eu/system/files/2021-01/factsheet-agri-practices-under-ecoscheme_e n_0.pdf

Ludwig-Maximilians-Universität München. Available at: https://www.en.uni-muenchen.de/index.html

Mission Barns. Available at: https://missionbarns.com/

OECD (2021). Agricultural Policy Monitoring and Evaluation. Available at: https://www.oecd-ilibrary.org/agriculture-and-food/agricultural-policy-monitoring-and-evaluation-2021_42285322

One Bite at A Time: Consumers and the transition to sustainable food, The European Consumer Organisation. Available at:

https://www.beuc.eu/sites/default/files/publications/beuc-x-2020-042_consumers_and_the_transition_to_sustainable_food.pdf

Order of the Minister of Health of the Republic of Lithuania: regarding the approval of the procedure for the organisation of food in preschool education, general education school, and children's social care institutions. (2011). Available at: https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.411986

Panhellenic Biocyclic Vegan Network. Available at: https://www.biocyclic-network.net/

PETA (2023). Available at: https://www.peta.org/

Plant Based Food Association (2022). Available at: https://www.plantbasedfoods.org/

Plant-Based Treaty. (2023). Available at: https://plantbasedtreaty.org/

Promotion of the CAP on the national level in Spain. Available at: https://www.mapa.gob.es/es/pac/pac-2023-2027/divulgacion-del-plan.aspx

Promotion of legumes in the region of Castilla Leon. Available at:

https://agriculturaganaderia.jcyl.es/web/jcyl/binarios/1/256/Promoción%20de%20las%20legumino sas%20en%20Castilla%20y%20León.pdf?blobheader=application%2Fpdf%3Bcharset%3DUTF-8&blobnocache=true

Recommendations to promote vegetable consumption. Available at: http://www.smlpc.lt/media/image/Naujienoms/2017%20metai/Mityba%20ir%20fizinis%20aktyvum as/_REKOM_VSBams_Darzoviu_vart_skat.pdf

Report from the Commission to the Council and the European Parliament on the development of plant proteins in the European Union. (2018). European Commission. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52018DC0757

Results of the Italy 2023 Report, Eurispes. (2023). Available at: https://eurispes.eu/news/risultati-del-rapporto-italia-2023/

RethinkX (2019). Rethinking Food and Agriculture 2020-2030. The Second Domestication of Plants and Animals, the Disruption of the Cow, and the Collapse of Industrial Livestock Farming. Available at: https://www.rethinkx.com/food-and-agriculture

Safe Food Advocacy Europe (SAFE). Available at: https://www.safefoodadvocacy.eu/

Safeguarding food security and reinforcing the resilience of food systems, European Commission. Available at:

https://agriculture.ec.europa.eu/system/files/2022-03/safeguarding-food-security-reinforcing-resilience-food-systems_0.pdf

School fruit, vegetables and milk scheme" "Strategy for the implementation of the school scheme in Lithuania from 2017/2018 to 2022/2023." Available at:

https://agriculture.ec.europa.eu/system/files/2021-01/lt-school-scheme-strategy-2020-12_en_0.pdf

School Scheme explained, European Commission. Available at:

https://agriculture.ec.europa.eu/common-agricultural-policy/market-measures/school-fruit-vegeta bles-and-milk-scheme/school-scheme-explained_en#strategies

Sentience Institute. Available at: https://www.sentienceinstitute.org/

Sicily's Rural Development Programme, 2014-2022. (Programma di Sviluppo Rurale, PSR). Available at:

https://www.psrsicilia.it/psr-sicilia-2014-2020/#:~:text=Il%20Programma%20di%20Sviluppo%20Rurale,020.750%2C03%20di%20spesa%20pubblica

SINTEF (2023). Available at: https://www.sintef.no/en/

Smart Protein Project. (2021). Available at: https://smartproteinproject.eu/

Spain's common agricultural policy strategic plan (2023-2027). Summary of the plan approved by the European Commission. Available at:

https://www.mapa.gob.es/es/pac/pac-2023-2027/resumen-pac-en_tcm30-636035.pdf

Statista Meat consumption worldwide from 1990 to 2021, by meat type. Available at: https://www.statista.com/statistics/274522/global-per-capita-consumption-of-meat/

Strategic Plan for Sicily 2023-2027 of the Common Agricultural Policy. Available at: https://www.regione.sicilia.it/istituzioni/regione/strutture-regionali/assessorato-agricoltura-svilupp o-rurale-pesca-mediterranea/dipartimento-agricoltura/piano-strategico-pac-2023-2027

Strategic research and innovation agenda (SRIA) "Sustainable food systems partnership for people, planet and climate." Available at:

https://scar-europe.org/images/food/main_actions/sfs_partnership_sria_31012023.pdf

Strategy for the implementation of the School Scheme in Greece from 2017/2018 to 2022/2023 school year. (2017). Hellenic Republic – Ministry of rural development and food. Available at: https://agriculture.ec.europa.eu/system/files/2018-10/el-school-scheme-strategy-2017-23_en_0.pd f

The global and regional costs of healthy and sustainable dietary patterns: a modeling study, M. Springmann, M.a Clark et al. (2021). Available at: https://doi.org/10.1016/S2542-5196(21)00251-5

The Good Food Institute. Available at: https://gfi.org/

The Vegan Society. Available at: https://www.vegansociety.com/

Vegan agriculture - A resource for the future, TerraNova. (2017). Available at: https://www.terranuova.it/Chiedi-all-esperto/Agricoltura-vegan-una-risorsa-per-il-futuro

Vegan Life NGO. Available at: www.veganlife.gr

Vegans Only Eat Processed Foods, Don't They? Veganuary. (2023). Available at: https://veganuary.com/vegans-processed-foods/

VeggieWorld trade fair. Available at: https://veggieworld.eco/en/

V-Label. Available at: https://www.v-label.com/

Wikifarmer platform. Available at: www.wikifarmer.com

World Health organisation (2021). Available at: https://www.who.int/















