



SUSTAINABLE APPROACHES TO FOOD ACROSS EUROPE

DESK RESEARCH



Co-funded by
the European Union



UNIVERSITY
OF TURKU

TABLE OF CONTENTS

Sustainable food practices.....	2
Common sustainable food practices seen across Europe	3
1. Local and Seasonal Eating	3
2. Organic Farming	4
3. Farm-to-Fork Farm	5
4. Community Supported Agriculture (CSA).....	7
5. Food Waste Reduction	7
6. Urban Agriculture	8
7. Sustainable Fishing	9
8. Food labeling and Certification	10
9. Policy Support.....	10
10. Education and Awareness	11
Conclusion	11

Sustainable food practices are gaining traction across Europe as individuals, businesses, and governments increasingly recognize the importance of reducing environmental impact and promoting healthier food systems.

These practices reflect a growing commitment across Europe to build more resilient and environmentally friendly food systems for the future.

The EU and the EU countries are committed to meeting Sustainable Development Goal (SDG) Target 12.3, adopted in September 2015, which aims to halve per capita global food waste at the retail and consumer level by 2030, and reduce food losses along the food production and supply chains. Quantification of European food waste levels (latest estimate by Eurostat, 2022) reveal that 69% of EU food waste arises in the household, food service and retail sectors, with production and processing sectors contributing the remaining 31%.

Tackling food waste means working together with all key players from public and private sectors in order to better identify, measure, understand and find solutions to deal with food waste. There is not one single cause with one solution because the food chain is a complex and dynamic system. All actors in the food chain need to work together to find solutions, from farmers, processors, manufacturers and retailers through to consumers themselves. Policy makers, research scientists, food banks and other NGOs also play an important role.

In order to support achievement of SDG Target 12.3 on food loss and waste and maximise the contribution of all actors, the Communication on Circular Economy (2015) called on the Commission to establish a Platform dedicated to food waste prevention. Thus the EU Platform on Food Losses and Food Waste (FLW) was established in 2016, bringing together EU institutions, experts from the EU countries, international organisations and relevant stakeholders selected through an open call for applications. The Platform aims to support all actors in: defining measures needed to prevent food waste; sharing best practice; and evaluating progress made over time.

https://food.ec.europa.eu/safety/food-waste/eu-actions-against-food-waste/eu-platform-food-losses-and-food-waste_en

Learn about the EU Platform's work on food waste prevention by watching the video

https://food.ec.europa.eu/safety/food-waste/eu-actions-against-food-waste/eu-platform-food-losses-and-food-waste_en#learn-more

Update: "Latest Eurostat data (2021) indicates that 32.6 million people cannot afford a quality meal (including meat, chicken, fish or vegetarian equivalent) every 2nd day, rather than 43 million as indicated in the video".

Green deal

Climate change and environmental degradation are an existential threat to Europe and the world. To overcome these challenges, the European Green Deal will transform the EU into a modern, resource-efficient and competitive economy, ensuring:

- no net emissions of greenhouse gases by 2050
- economic growth decoupled from resource use
- no person and no place left behind

COMMON SUSTAINABLE FOOD PRACTICES SEEN ACROSS EUROPE

1. LOCAL AND SEASONAL EATING

Many Europeans prioritize consuming locally grown and seasonal produce. This reduces the carbon footprint associated with transportation and supports local farmers. Introducing more locally grown and seasonal foods into your diet has loads of benefits for you, your community and our environment.

- **It will reduce your environmental impact**

Food that has travelled across the world to get to your plate has a much higher impact on our environment. More energy is needed to transport, refrigerate and store it and often, more packaging is needed to keep it fresh. By eating local, seasonal foods you can help reduce the environmental costs associated with your food.

- **You can eat better food for less**

Local produce is more likely to be ripened on the farm before being harvested and delivered. This food is fresher, tastes better and is more nutritious. Although local food can be more expensive, buying in season means you're getting it at peak supply when it's at its cheapest.

- **It supports your local community**

When you buy locally produced food, the money you spend stays in Ireland to support our farmers and communities.

- **It's easier to know what you're getting**

Our globalised food system gives us great choice and convenience when it comes to our food. However, increasing the distance between where food is grown and processed makes it harder to get information about how it has been produced. The easiest way to know your food is to know where it comes from.

- **You can help Stop Food Waste!**

The longer food spends in storage and transit, the higher the chance of it spoiling and becoming waste. More than half of all food waste occurs along the supply chain. Buying locally and in season can help reduce the risk of food becoming waste before it gets to the shelves.

<https://stopfoodwaste.ie/resource/5-reasons-to-eat-local-seasonal-food>

2. ORGANIC FARMING

Organic farming methods, which avoid synthetic pesticides and fertilizers, are widespread in Europe. Organic certification ensures that food is produced in an environmentally friendly manner.

PrintOrganic agriculture in Europe is an economic success story. It offers a real response to the catastrophic decline in wildlife resulting from intensive industrial farming practices. However, challenges remain, and innovation is needed. The European organic movement with the support of the EU needs to rise to the challenge and make certified organic agriculture the agroecological farming system of the future.

Organic food is grown or produced without the routine use of pesticides, manufactured fertilisers or antibiotics, with high animal welfare standards, and is GM free. Organic agriculture in Europe is an economic success story, with the area of organic certified land growing 25% between 2012 and 2017, and the sale of organic produce reaching 33.5 billion euros. A comprehensive, recently updated EU regulatory regime for all farmers, processors and producers who wish to sell 'organic' and benefit from the premium this attracts, offers a guarantee to European consumers that their food is produced to a clearly defined set of standards.

The environmental and biodiversity benefits of organic agriculture have long been reported in scientific literature. Organic farming offers a real response to the continuing catastrophic decline in wildlife in the European countryside resulting from intensive industrial farming practices, particularly the use of pesticides. These chemicals are now also linked to negative effects on human health.

Organic agriculture in Europe is an economic success story, with the area of organic certified land growing 25% between 2012 and 2017, and the sale of organic produce reaching 33.5 billion euros.

Three key challenges remain: the organic price premium, supermarket food systems, and climate change.

Organic food has long had the reputation of a choice for wealthy consumers. Data from the US suggests the premium on organic food compared to non-organic can range

from 7% for spinach to 82% for eggs. This reflects higher production costs but the European organic farming movement needs to address the social and economic aspects of the wider food system. At their core, nutritionally poor diets and obesity are caused by poverty. But 'cheap' food with lower safety and environmental standards is not an acceptable answer. New ways need to be found to increase access to fresh fruit, vegetables and unprocessed food for Europe's poorest communities.

(Isabel Tomlinson: <https://feps-europe.eu/european-organic-agriculture-future-challenges/>)

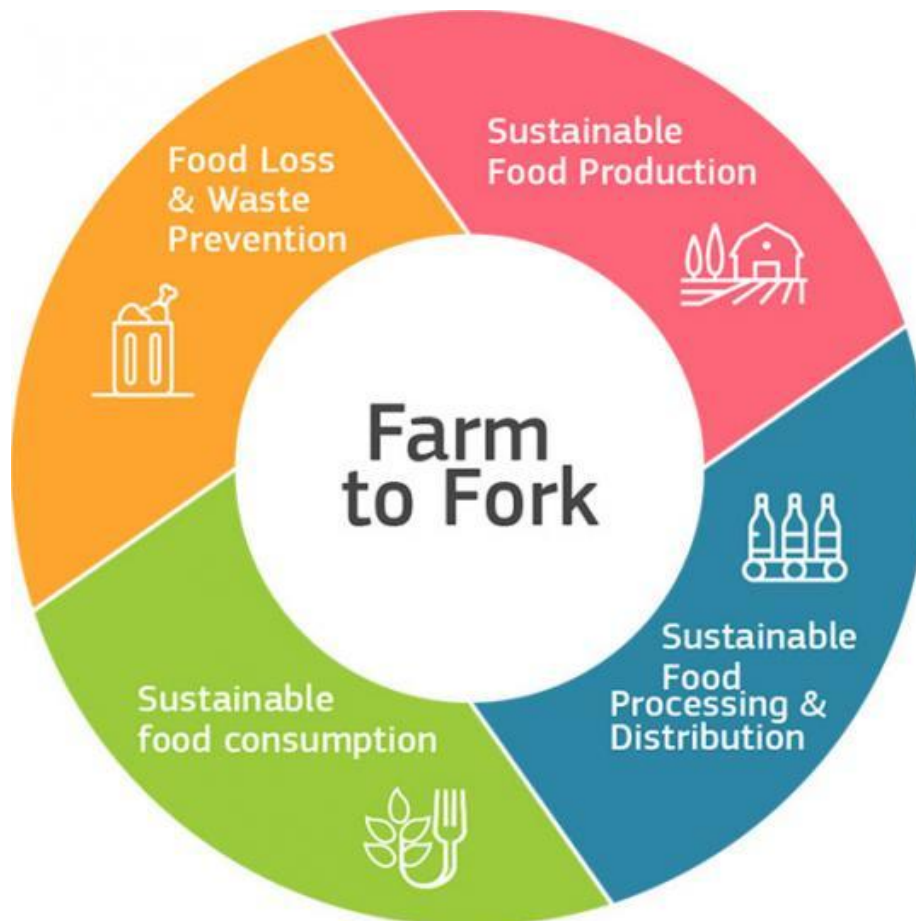
3. FARM-TO-FORK FARM

Sourcing ingredients directly from local farms and producers, emphasizing freshness, quality, and sustainability for a fair, healthy and environmentally-friendly food system

The Farm to Fork Strategy is at the heart of the European Green Deal aiming to make food systems fair, healthy and environmentally-friendly.

The Farm to Fork Strategy aims to accelerate our transition to a sustainable food system that should:

- have a neutral or positive environmental impact
- help to mitigate climate change and adapt to its impacts
- reverse the loss of biodiversity
- ensure food security, nutrition and public health, making sure that everyone has access to sufficient, safe, nutritious, sustainable food
- preserve affordability of food while generating fairer economic returns, fostering competitiveness of the EU supply sector and promoting fair trade



The strategy sets out both regulatory and non-regulatory initiatives, with the common agricultural and fisheries policies as key tools to support a just transition.

A **proposal for a legislative framework for sustainable food systems** will be put forward to support implementation of the strategy and development of sustainable food policy. Taking stock of learning from the COVID-19 pandemic, the Commission will also develop a **contingency plan for ensuring food supply and food security**. The EU will **support the global transition** to sustainable agri-food systems through its trade policies and international cooperation instruments.

To enable and accelerate the transition to a fair, healthy and environmentally-friendly food system, **advisory services**, **financial instruments**, but also **research** and **innovation** are instrumental as they can help resolve tensions, develop and test solutions, overcome barriers and uncover new market opportunities.

4. COMMUNITY SUPPORTED AGRICULTURE (CSA)

CSA programs allow consumers to buy shares in a local farm's harvest, receiving regular deliveries of fresh produce. This model supports local farmers financially and strengthens community ties.

Other economic models for supplying organic produce are evolving. Community-supported agriculture schemes (CSAs) involve local people providing long-term economic support to a local farm through subscriptions, committing to buy a share of the harvest, or assisting with farm work. CSAs reduce the need for packaging as produce is transported over much shorter distances. The popularity of CSAs is increasing, but CSA members are typically women, white, highly educated, and affluent. More needs to be done to ensure that the positive impact on diets that CSAs can have is felt by low income households.

Industrial food and farming systems make a very large contribution to climate change. Currently about 17% of EU household greenhouse gas footprints are associated with food consumption. How should the organic movement respond? It is clear that organic farming systems can provide a way for farmers to increase organic matter in soils and play an important role in sequestering soil carbon. Livestock fed on certified organic feed avoids emissions from land use change because forests are not permitted to be cut down or pasture ploughed-up to produce organic feed. But livestock products are resource intensive and cause pollution.

Diets need to change, and not just for the significant health benefits it would bring. A recent study published in *The Lancet* found that meat consumption would have to fall by 77% in Europe to avoid runaway climate change and other environmental problems. Organic farming systems in Northern Europe have traditionally relied on grass-fed grazing animals as an integral part of a mixed system, to provide nutrients in the form of manure. But the organic movement is starting to recognise that innovation is needed. Agroecology has been taken up by many advocating new approaches such as agroforestry, vegan farming and forest gardening.

5. FOOD WASTE REDUCTION

Initiatives aimed at reducing food waste are prevalent across Europe. This includes efforts to redistribute surplus food to those in need, composting programs, and educational campaigns to encourage mindful consumption.

Case studies:

- Norway

https://food.ec.europa.eu/document/download/3c516f6b-f01e-4b3e-a752-8ba8519275e3_en?filename=fw_eu-platform_20230511_sub-flwm_pres04.pdf

- Sweden

https://food.ec.europa.eu/document/download/bacaa229-3668-4f59-8b3a-14af0a3ee302_en?filename=fw_eu-platform_20231011_sub-flwm_pres-04.pdf

- Finland

https://food.ec.europa.eu/document/download/de0148a8-0625-4016-a37d-9b42a1ce1b9d_en?filename=fw_eu-platform_20230511_sub-flwm_pres05.pdf

6. URBAN AGRICULTURE

Urban farming is the practice of cultivating crops, livestock, or types of food in an urban environment. Urban farming initiatives, such as rooftop gardens, community gardens, and vertical farms, are becoming more popular in European cities. These projects promote local food production, biodiversity, and green spaces in urban environments. Urban farming has become a hot topic for agricultural sustainability and social justice advocates alike, as it can provide avenues to positive change.

There are several practical benefits of urban farming

- **Locally raised products:** It takes a lot of energy to ship produce across the globe. Urban farming can help provide more local sourcing options.
- **Density:** Practices like vertical farming can allow for more production per square foot.
- **Redevelopment:** Urban agriculture operations may be able to put unused spaces like warehouses to good use—a benefit for residents and urban planners alike.
- **Community / civic pride:** Community gardens run by municipal or non-profit organizations can help residents build stronger ties to where they live and reduce the urban blight associated with empty lots.

<https://unity.edu/careers/what-is-urban-farming/#what-is-urban-farming>

Given Europe's extensive coastline and reliance on seafood, sustainable fishing practices are crucial. Measures such as quotas, fishing restrictions, and certification programs aim to protect marine ecosystems and fish stocks.

Sustainable fishing practices in Europe are essential for maintaining the health of marine ecosystems, ensuring the long-term viability of fish stocks, and supporting the livelihoods of fishing communities.

Key aspects of sustainable fishing in Europe:

- **Fisheries Management**

The European Union (EU) implements fisheries management measures to regulate fishing activities and prevent overexploitation of fish stocks. This includes setting catch limits, implementing fishing quotas, establishing fishing seasons, and implementing technical measures to reduce bycatch and minimize environmental impact.

- **Common Fisheries Policy (CFP)**

The CFP is the primary framework for managing fisheries in EU waters. It aims to ensure sustainable fishing practices, promote responsible fisheries management, and support the economic viability of the fishing industry. The CFP sets out rules for conservation, management, and exploitation of fishery resources.

- **Quotas and Total Allowable Catches (TACs)**

The EU sets quotas and TACs for various fish species based on scientific advice and conservation objectives. These quotas limit the amount of fish that can be caught annually to prevent overfishing and maintain healthy fish populations.

- **Fishing Gear Regulations**

The EU regulates the use of fishing gear to minimize environmental impact and reduce bycatch. Measures include restrictions on certain types of fishing gear, gear modifications to reduce bycatch, and the promotion of selective fishing techniques.

- **Control and Enforcement**

The EU implements monitoring, control, and surveillance measures to ensure compliance with fisheries regulations. This includes vessel monitoring systems, onboard observers, port inspections, and electronic logbooks to track fishing activities and enforce regulations.

Certification and Labeling: Certification schemes such as the Marine Stewardship Council (MSC) provide third-party verification of sustainable fishing practices. Products from certified fisheries bear the MSC label, helping consumers make informed choices about sustainably sourced seafood.

Research and Innovation: Investment in research and innovation is crucial for advancing sustainable fishing practices. This includes studies on fish stock assessments, ecosystem dynamics, fisheries management techniques, and the development of new technologies to minimize environmental impact.

International Cooperation: Given the migratory nature of many fish species, cooperation between countries and regional fisheries management organizations is essential for effective fisheries management and conservation efforts. The EU collaborates with neighboring countries and international partners to promote sustainable fishing practices and protect shared marine resources.

By implementing these measures and promoting sustainable fishing practices, Europe aims to ensure the long-term health and resilience of its marine ecosystems while supporting the economic and social well-being of fishing communities.

8. FOOD LABELING AND CERTIFICATION

Labels such as Fairtrade, Rainforest Alliance, and Marine Stewardship Council (MSC) certification help consumers make informed choices about sustainably produced food products.

9. POLICY SUPPORT

European Union policies and regulations promote sustainable agriculture and food production practices. Initiatives include subsidies for organic farming, agroecological approaches, and environmental stewardship schemes.

The key recommendations for action of the EU Platform on Food Losses and Food Waste were published in December 2019.

https://food.ec.europa.eu/document/download/7143f94e-600f-4df5-acef-5b332e7e44ec_en?filename=fs_eu-actions_action_platform_key-rcmnd_en.pdf

10. EDUCATION AND AWARENESS

Educational programs, public campaigns, and consumer awareness initiatives play a vital role in promoting sustainable food practices. By increasing knowledge about the environmental, social, and health impacts of food choices, individuals are empowered to make more sustainable decisions.

CONCLUSION

Sustainable food practices across Europe demonstrate a collective move toward environmentally responsible, socially equitable, and economically resilient food systems. Approaches such as local and seasonal eating, organic farming, community-supported agriculture, urban agriculture, and sustainable fishing all contribute to reducing environmental impacts while supporting healthier diets and local economies. Policies like the European Green Deal and the Farm to Fork Strategy provide essential direction, reinforcing the EU's commitment to lowering emissions, preventing food waste, and improving food system resilience.

Despite significant progress, challenges remain—particularly around affordability, equitable access to sustainable foods, and the need for ongoing innovation. Continued collaboration among governments, producers, communities, and consumers will be crucial. Europe's momentum offers a strong foundation for building food systems that are both sustainable and accessible, ensuring long-term environmental and social benefits.

THIS DOCUMENT WAS CREATED WITHIN THE PROJECT
GREEN AND SUSTAINABLE FOOD EDUCATORS
KA220-VET - COOPERATION PARTNERSHIPS IN VOCATIONAL EDUCATION AND TRAINING
PROJECT NO. 2022-1-FI01-KA220-VET-000085304

COORDINATED BY



PARTNERS



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



CC BY-NC-SA 4.0 Dee

Attribution-NonCommercial-ShareAlike 4.0 International