

Building food system resilience through healthy and sustainable school meals

European Food System Resilience

Resilient food systems have the capacity to absorb, adapt, and transform in the face of shocks and stresses, while ensuring continuous, equitable, and sustainable access to safe and nutritious food for all¹. Our current food systems are not offering nutritious food for all, made evident by rising childhood and adolescent obesity (increasing the risk of diet-related health problems), impacting children in poverty the most². School meal programmes are in fact among the most effective public policy tools for reducing diet-related inequalities and promoting sustainable food systems³.

Vulnerabilities in our food systems are also currently exposed by the lack of generational renewal in agriculture that helps safeguard Europe's capacity to produce food, maintain innovation, and sustain life in rural areas, increasingly extreme and unpredictable climate conditions, ecosystems and soil degradation, and our high dependency on key inputs⁴ affected by recent global trade shocks (input cost increase and reduced availability) caused by COVID-19, the war in Ukraine⁵ and the conflicts in the Middle East⁶. The emerging era of trade protectionism, with escalating tariffs and geopolitical fragmentation, further threatens the stability of global food supply chains and highlights the urgent need for Europe to strengthen the resilience of its food system. In this context of growing



uncertainty, investing in sustainable regional food systems less susceptible to geopolitical and climate disruptions is a strategic necessity for European food security and long-term competitiveness. Advancing food system resilience through school meal programmes supports multiple EU policy and legislative tools, resolutions, initiatives and goals simultaneously: the EU School Scheme (promoting healthy eating habits among children in schools), the EU Child Guarantee (nutrition access and free meals in schools for children in need), the EU Anti-Poverty Strategy (reducing food insecurity among children and families), the European Pillar of Social Rights (fair and inclusive Europe), the European Green Deal, the EU Vision for Agriculture and Food (healthy diets, resilience, sustainability), the FOOD 2030 Research & Innovation Policy Framework, and the UN Sustainable Development Goals.

The SchoolFood4Change triple impact approach

Core innovation of [SchoolFood4Change](#) (SF4C) is its interconnected triple approach (Figure 1).

The Whole School Food Approach: Integrates food into school curricula and school culture by linking what is served with what is taught and experienced. Whole School Food Approach supports schools, local authorities, pupils, teachers, families, farmers, and kitchen teams in co-creating, monitoring, and adapting school food policies to drive healthy and sustainable dietary behavior.

Training for Planetary Health Diets: Strengthens the capacity of cooks, chefs, and school food staff to deliver Planetary Health Diet based meals (a science-based eating pattern designed by the [EAT-Lancet Commission](#) to optimise human health while staying within planetary boundaries). Training translates sustainability and nutrition objectives into daily practice and supports ongoing innovation in menus, waste reduction, and dining environments.

Sustainable and Healthy Food Procurement: determines which food is sourced in schools, using public tenders and technical criteria that strengthen sustainable food production and regional supply chains. City-specific procurement plans and market dialogues align sourcing with nutritional, social, and environmental priorities while opening opportunities for smaller producers, particularly those using organic farming practices.



Figure 1: SchoolFood4Change Triple Approach



Evidence from SchoolFood4Change

By targeting schools and engaging children and youth, SF4C is successfully impacting over 3,800 schools and over one million pupils across 22 EU countries. The initiative has demonstrated how an integrated triple impact framework offers a structural, multi-level governance model that helps to harness the potential of school meals to leverage change for resilient food systems. The three parts of the approach reinforce each other through strengthened collaboration between local and regional governments, schools, kitchens, canteens, suppliers (farmers and producers), caterers, caregivers, and pupils, ensuring that the approach aligns with interest group priorities and context-specific needs.

The main barriers for implementing the triple approach demanding EU-level action identified in SF4C include:

Regulatory framework and governance at EU level: Policies and regulations related to school food and education are dispersed across six different directorate-generals of the European Commission, and fragmented regulatory frameworks around public procurement.

Finance and governance: Lack of strategic paid coordination capacity needed to sustain systemic change.

Training and infrastructure gaps: for example, shortages of trained kitchen teams and a lack of kitchens, storage and logistics capacity.

An analysis was undertaken in four cities and one country (cities of Copenhagen, Denmark; Tallinn, Estonia; Ghent Belgium; Nuoro, Italy and cities in the Czech Republic) to quantify the social return of transforming school meal programmes into a service that delivers healthier and more sustainable food to children. The findings show that, in the EU, for every additional €1 invested in transforming school meals, at least €2.50 is generated in social, environmental and health-related benefits. These benefits include healthier and more sustainable meals for children, reduced food waste, support for local and sustainable producers, a lower environmental impact, and improved access to healthy meals for the most vulnerable students. Although based on a selected group of case studies, the analysis provides an indicative EU-level benchmark of the additional social value generated by the transition from standard to more sustainable school meal systems in municipalities where school meal programmes already exist.



Recommendations for a European framework enabling healthy school meals for public health and food system resilience

1. Strengthen EU governance for school meals

Recognise school meals as a cross-cutting policy lever for food system resilience.

✦ **Set up structured EU coordination mechanisms (cross directorate-generals of the European Commission) on school meals** (SANTE, AGRI, EAC, EMPL, ENV, GROW) to ensure greater cross policy coherence – encompassing health, education, agriculture, procurement, social inclusion, youth, rural development, environment and climate.

✦ **Strengthen the EU Child Guarantee** by establishing an EU-wide standard for healthy school meals paired with food education for all children (universal access) - recognising healthy and sustainable school food environments as a core instrument for greater social resilience, improved child nutrition, better health, reduced poverty and inspire action toward a healthier more sustainable food system.

✦ **Systematically integrate school meals in ongoing EU policy processes**, in particular the implementation of the EU Vision for Agriculture & Food, the revision of the EU School Scheme, the upcoming EU Anti-Poverty Strategy, the European Pillar of Social Rights, relevant European Climate Resilience and Risk Management policies, and One Health frameworks.

2. Mainstream the triple approach for resilient school food systems

Use the Whole School Food Approach, sustainable procurement, and healthier menus as the main levers for improving school meal systems and supporting food system resilience.

✦ **Position the Whole School Food Approach** as the EU reference framework for integrating food and nutrition education, food cultures, health and community engagement in schools across all EU Member States.

✦ **Establish EU minimum mandatory nutritional and sustainability standards** for school meals, building on the evidence and guidance from SF4C, which is reinforced by the [EU's Sustainable Public Procurement Criteria for Food](#) from the Joint Research Centre⁷, and better connecting sustainable food procurement actions at regional, local, and school levels with the EU School Scheme, linking these initiatives to small-scale farmers, particularly those operating in organic farming and other agroecological practices. Small scale farmers are generally not oriented towards large markets, face ongoing economic viability challenges, and would benefit from stronger links to urban food supply chains. Improved conditions for participation could help make these connections more accessible and build meaningful bridges to help overcome the urban-rural divide.

✦ **Enable the use of sustainable public food procurement as a resilience lever** by opening legal possibilities for local and regional sourcing (amend procurement guidance in the Directive 2014/24/EU)⁸ while lowering barriers for small and medium-sized suppliers to participate in tenders.

✦ **Support the transition to healthier, plant-forward menus** that align with planetary health principles, while ensuring nutritional adequacy and cultural acceptability, and provide practical tools, recipes, and training for kitchen staff to implement appealing menus that children of all ages will eat. For examples visit [SF4C website](#) resources under Planetary health diets and cooking.

3. Prioritise strategic investment in resilient school meal systems

Ensure structural funding streams for supporting healthy and sustainable school meals and food environments.

- ✦ **Establish EU-level support for national and regional coordination structures for governing school meal programmes** to ensure continuous support, monitoring, and knowledge-exchange across countries. Structural funding prevents local authorities and schools from viewing Whole School Food Approach as temporary bureaucracy and ensures that coordination roles are permanently financed.
- ✦ **Allocate dedicated European Regional Development Fund resources for infrastructure** investments, including school kitchens and catering infrastructure, resilient local supply chains, and innovative procurement models.
- ✦ **Include "Resilient School Meal Systems" as a priority topic** by recognising these as a key lever in EU and national public health prevention programmes, and in the reduction of poverty through upcoming updates to EU social policies and EU climate resilience and adaptation policies. This includes the establishment and funding of cooking, food education programmes and pedagogical kitchens, as part of implementing a Whole School Food Approach and as life skills in curricula (inspired by the Finnish and Swedish models). Furthermore, this requires significantly increasing financial investment in the EU School Scheme, transforming it into a strategic policy instrument that actively complements healthy public food procurement in schools and ensures comprehensive food and nutrition education for all pupils. Strengthening the Scheme in this way would enable it to play a central role in advancing food security, reducing food poverty among families, creating stable, structured market opportunities for small-scale farmers by directly linking them to school food supply chains - particularly those otherwise excluded from larger commercial markets, and connecting schools, children and adolescents with farmers for educational purposes and for the future farming profession in Europe (generational renewal).
- ✦ **Align investments with the objectives and strengthening of the future EU Child Guarantee** to ensure equitable access to healthy and sustainable school meals.



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