



Draft

SUSFANS: METRICS, MODELS AND FORESIGHT FOR EUROPEAN SUSTAINABLE FOOD AND NUTRITION SECURITY. Key messages.

This text contains a preliminary set of messages and recommendation from the SUSFANS project that have been presented to the stakeholder workshop in Brussels on March 7, 2019 and were subsequently discussed at the world cafe and policy roundtable on this meeting. Results from the discussions will be processed, along with an update on the project results, into a SUSFANS policy brief. The brief will be launched on April 15, 2019.

SUSFANS major findings:

- **An integrated assessment of the sustainability performance of the EU food system should at least cover nutrition & health, social, economic and environmental sustainability domains.**
 - Our vision for the EU food system is that it delivers balanced and sufficient diets, reduced environmental impacts, viable business and jobs, and equitable outcomes.
 - The specific choice of metrics is decisive for how to prioritize the challenges for food systems transformation.
 - Different actors in the food system have different views on how to manage the trade-offs in the food system, e.g. between a healthier and more sustainable diet. These differences can be made explicit and turned into opportunities and drivers of change. For example, the perspectives from EU citizens on sustainable consumption differ widely across the SUSFANS study countries: Czech Republic, Denmark, France and Italy.
- **The sustainability performance of EU food system is qualified as weak, which means that the EU food system is insufficiently "future-proof":**
 - Current nutritional patterns are imbalanced, resulting in a substantial but avoidable burden of diet-related diseases (e.g. heart disease and cancer). Several micronutrient deficiencies are widespread, and may become more important for B12, calcium, and Zinc, in some countries and subgroups;
 - The environmental impact of dietary patterns is large and related to meat, especially red & ruminant meat, overconsumption and food waste. While food waste in the EU was not explicitly quantified, we observe a gap between food availability in the EU (based on FAO balance sheet data) and food intake (from nutrition surveillance data at the individual level) of about 1,000 kCal per person per day, in the four case study countries. Current food intake is estimated around [2,600 kCal] per person per day in these countries;
 - The economic viability of primary agriculture and fisheries and food production is under threat of more competitive regions in the world and low profit margins. Opportunities for

a more quality-driven food supply and matching demand on international markets could result in better margins and overcome the dichotomy between profit and safeguarding the planet. Also, a stronger risk of drought and other crises events on food markets is considered to test the resilience of farming activities, although unevenly across regions;

- Equity and social justice under pressure, with food access not guaranteed across the EU population and unequal diet quality observed in the population, by education levels and gender. Also, the position of farmers in the food value chain is under threat in the face of large buying power from upstream value chain partners. Using an innovative metric, farmer's profit margins were assessed as fluctuating [4-5] times more than the profits of food retail, for selected value chains in France and Italy.
- **Despite substantial regional and cultural variation in diets, challenges for EU consumption patterns are largely similar, although with differences in detail across regions:**
 - For more balanced and sufficient diets, consumption patterns need shift towards:
 - reduce energy intake and
 - more Fruits and Vegetables/legumes/nuts and
 - less added sugar and alcohol,
 - Reduce meat intake, which now exceeds the recommended intake of 500g/wk across the countries, while ensuring intake of key micronutrients in replacement. A shift in the meat-mix needs attention.
 - Reducing the environmental impact of consumption, with two major entry points:
 - Reduce energy intake towards recommended levels. In particular, reductions in meat consumption, which is dense in calories and associated with significant environmental impact, towards recommended levels would bring combined sustainability and health benefits;
 - Diversify food intake patterns, towards a more balanced composition of the diet. The replacement of meat in the diet
 - decoupling of food production from environmental impacts,
- **SUSFANS presents a novel approach to quantify diet change, policy and production system innovations, and assess the potential impact on the sustainability performance of the EU food system:**
 - Include EU-specific nutrition surveillance data (i.e. individual food intake) in a framework for integrated multi-criteria assessment of the EU and global food system, benchmarking national data against a reference sustainable, healthy diet for EU.
 - Model the entire system, including post-harvest food handling & retail, global trade, natural resource use, food loss and waste, and impacts on diets, environment, economy and equity.
 - Exploring instruments and transformative pathways incl. economic sustainability and equity

- **2030 Agenda: Opportunities for bending EU food system from quantity-driven to quality-driven**
 - Growth, demography, trade drivers suggest window of opportunity for aligning EU agriculture with environmental boundaries while remaining globally competitive as sustainable producer.
 - Support the EU-interface for food, nutrition & health: by extending the survey-based analyses of dietary patterns to larger set of EU countries, targeting policymakers, private sector and consumers.
 - Various drivers of sustainable consumption among EU consumers, are in line with health benefits, and generate higher value added.
 - meat consumption : trends are minor reduction of meat reduction in France (there is a consumer segment that is willing quantity for quality. We cannot quantify but can illustrate the point with income elasticities for France and Finland.) In France there is no effective animal welfare classification. Trade-off: one solution pay for AW and other is to reduce consumption. Can we use the choice experiment study to discuss this point? In the ranking they rank the criteria.
 - There are barriers but 1) there are also consumers willing to change; 2) all interventions based on information even if have small effect they are cost-effective. Gains in terms of environment and health are significant. It makes sense to have labelling and communication interventions for behaviour change, but alone they will not deliver with sufficient impact to push diets towards recommended levels.
 - Involve consumer drivers in employing new metrics (e.g. emission per diet quality index instead of per tonne) in decision-making on innovation strategy for industry
 - Economic sustainability requires re-think of the position of farmers in the value chain, as market concentration is likely to further increase. Future scenarios point to the diverging climate change impacts across the EU and globally, resulting in more frequent fluctuations on agricultural commodity markets in the EU and globally. The impact of stabilization policies have been explored.

SUSFANS main policy recommendations:

Key recommendation: it is possible for the EU to move towards sustainable diets and a sustainable food supply system in a matter of decades, but only with a proper transformation of production, trade, distribution, and consumption of food. SUSFANS presents a number of general recommendations on how to enable this transformation:

Better coordination of national consumption patterns at EU level.

- Formulate and EU-wide reference sustainable and healthy diets as a starting point for national food-based dietary guidelines that include environmental considerations using a scientific protocol standardised at the EU level. FBDG should remain in the national policy remit, as they need to consider regional food cultures.
- However, an opportunity exists for an increasingly harmonised surveillance and data network that connects dietary quality better to food safety, environmental performance, and consumer preferences. A monitoring of European food consumption patterns is needed by benchmarking diets in all EU Member States with consistent methods to assess food and nutrient level, environmental impact, affordability, etc.

Better involve consumer behaviour in the management of trade-offs across and within the nutrition & health, social, economic and environmental sustainability domains, and support an

aligned multi-level and multi-dimensional food policy framework in the EU and Member States.

- There is a novel audience for national food consumption data in the EU, beyond the traditional use for nutrition and health policy in the Member State countries. Consumer-driven solutions are also identified for other global challenges. For example, food consumption provides a key entry point for climate change mitigation. Also, sustainable consumption entails reduced food waste and promotes resource use efficiency. Diet shift has a likely strong potential impact on global emissions from agriculture, but less pronounced impact on the emissions from the European diet.

The Common Agriculture and Fisheries Policies should be addressed to promote sustainability in primary food production in the EU. Limited efforts should go into transforming the CAP into a framework that supports healthy diet

- The Common Agriculture and Fisheries Policies should promote sustainability in primary food production in the EU, in particular by supporting a better management of nutrient balances in farming systems, particularly livestock systems, and the management of fish stock at a maximum sustainable yield. In the context of open markets and trade (both intra-EU and global trade), the CAP and CFP instruments have limited impact on consumption patterns in the EU. A prolongation of existing policy instruments will bring very limited impact on the Health and Nutrition objectives of a future CAP
 - EU consumers mostly eat "local food", i.e. food produced in their own country. By consequence, a more sustainable supply will contribute to some extent to improve the sustainability of the diet of the European consumer.
 - Resource use problems, specifically the nutrient issue also come from diet composition (meat...income development globally as driver) in line with diet health issues. Supply side policies should better internalize the social cost of production which will make meat production more expensive. Otherwise look for consumption related policies and let supply side continue to deliver for the market. Difficult and expensive to influence healthy diet composition from with supply side policies.
 - Meat supply. The reorganisation of meat chains. Push producers to meet the quality in products and processes. Supporting producers in making the transition.
 - Limited efforts should go into transforming the CAP into a framework that supports healthy diet, and health and nutrition objectives from the CAP should not be emphasised. There is however a need for alignment with a food policy that promotes consumption of the recommended diet.
 - There is a mismatch between farm policy instruments and the food based dietary guidelines: common market organisations (CMO) for primary agricultural products under the EU's common agricultural policy (CAP), a major farm policy instrument, are not in place for foods that are recommended to increase in the diet, such as fruit, vegetables and legumes; the existing set of CMOs promotes the supply of food products that are recommended to be reduced in the European diet, with the exception of dairy (see table 1). In the fruit and vegetables. Short supply chains? Alignment with a food policy that promotes fruit and vegetables consumption. But note that the story of CMOs is not generally that they have fostered consumption of the products under regulation (see for example sugar or also dairy).

Table 1. Mapping dietary recommendations to common market organisations (CMO) for primary agricultural products under the EU's common agricultural policy (CAP).

	CMO	No CMO
Diet recommendation - To increase: <ul style="list-style-type: none"> • Vegetables • Fruit • Legumes • Nuts and seeds • Fish • Milk 	Dairy	Vegetables Fruit Legumes Nuts and seeds Fish
Diet recommendation - To reduce: <ul style="list-style-type: none"> • Red and processed meat • Sugar sweetened beverages • Cheese • Alcohol (ethanol) • Salt 	Beef Pork Poultry Dairy Sugar Grains	(Processed meat) (Salt) (Ethanol)

Intervention ladder a starting point for a combination of more incentives-based AND more directive instruments and need to frame in full food system setting. True cost pricing to be explored.

- BCC works and we should continue even if short term impacts are small. Takes 20 years to change behaviour? All instruments have weak effect but they are positive. **The main issue is to combine instruments in a synergistic and to maintain instruments in the long term.**
- BCC campaigns, fiscal policy (France experiment soda tax 2012). Carbon tax: in the literature several results. It is possible to quantify the impact of carbon taxes on the consumption volume and to social cost-benefit analysis for health and environment. **Irz et al. papers** give insight. Roel Jongeneel tax 400% on producer for what effect (PE model)? There is no evidence on the feasible tax level that gives the targeted healthy diet. We don't how to reach but we know how to start. But taxes are regressive and equity considerations must be included in the mix.
- Consumer perceptions of sustainability and drivers of change were explored in experimental settings.
 - "Sustainability": environmental, equity. Not healthy. Not economic viability.
 - Sustainable consumption: seasons; portion size, labelled food, etc
- A welfare analysis of the health and environmental impacts of dietary changes associated with the adoption of dietary recommendations, should also include the consumer habits and "taste cost" involved in changing from the current diet.
- **Consumer information including labelling can be seen as supportive policies** for a shift in consumer behaviour but evidence varies on the targeting of health and sustainability information to consumers:
 - the sustainability information provided little benefit over health information in an experiment on a soy-based meat substitute ([Marette, 2017](#));
 - consumers preferred combined health and sustainability information in a choice experiment on fruit and vegetables products ([Bouwman et al., 2018](#)).

- Both experiments suggest **the importance of price drivers** in steering towards healthier dietary choices
 - Firms' strategies in food innovation and reformulation and their responses to nutritional policies
 - Food reformulation (decrease in salt, fat, sugar... contents in foods) **may have significant effects on public health**
 - Food industry has **initiated the reformulation of food products**, but the effects on **consumers' intakes are still modest**.
 - Some blocking points. **Main difficulty is related to consumer acceptance** ('healthy=not tasty intuition').
 - **Debate about the need of public intervention** to improve the average nutritional quality. Comparison of the effects of voluntary commitments, minimum quality standards, tax policies.
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March 11, 2019. Find more information at www.sufans.eu

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