

SUSFANS Case studies

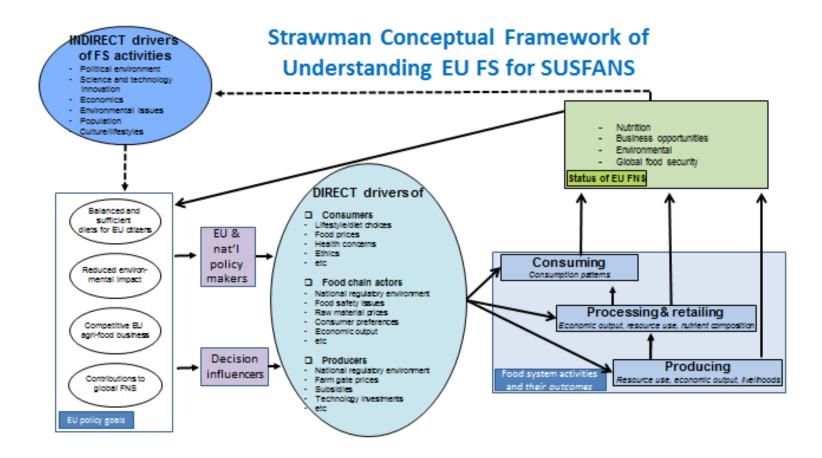
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SUSFANS Case studies – WHY?

- As a tool to explore bringing together metrics, modelling and innovations within a scenario framework
- As an exercise to find out which innovative sustainability pathways can contribute to future FNS in the EU
- As a test for the SUSFANS methods







SUSFANS Case studies

- Livestock-fish that addresses the supply chain of livestock and fish from a producer's perspective
- Fruit-vegetables that addresses the supply chain from a consumer's perspective





Case study: Livestock - Fish

- Rich sources of nutrients: protein, fat, including saturated fat, iron, zinc, selenium, vit A, vit B12, vit D
- Daily consumption in EU: 61 g protein from Animal Source Food (ASF) per person per day
- Health issues: heart diseases, cancer
- Environmental issues: Production ASF results in 14.5% GHG
- 70% agricultural land use









Case study: Livestock – Fish How to reduce consumption of Animal Source Food?

- Which ASF products should we reduce? Which FNS issue are of most importance?
- Protein, iron,
- Which environmental issues are of concern?
- Climate change, water use, feed-food competition,
- Which innovations contribute to FNS and reduce environmental impact?
- Bio-fortification, replacing meat by fish, insects,









Case study: Fruit & Vegetables

- Rich sources of nutrients: dietary fibre, vitamins, bioactive substances
- Nutrient dense (nutrients / energy content)
- Daily consumption in EU: less than the guidelines suggest
- Health issues: overweight/obesity, heart diseases, cancer, diabetes







Case study: Fruit & Vegetables How to increase consumption?

- Which F&V products should we increase? Which FNS issue are of most importance?
- Dietary fibre, vitamins, bioactive substances
- Which environmental issues are of concern?
- Water use,
- Which innovations contribute to FNS and reduce environmental impact?
- Processing, replacements

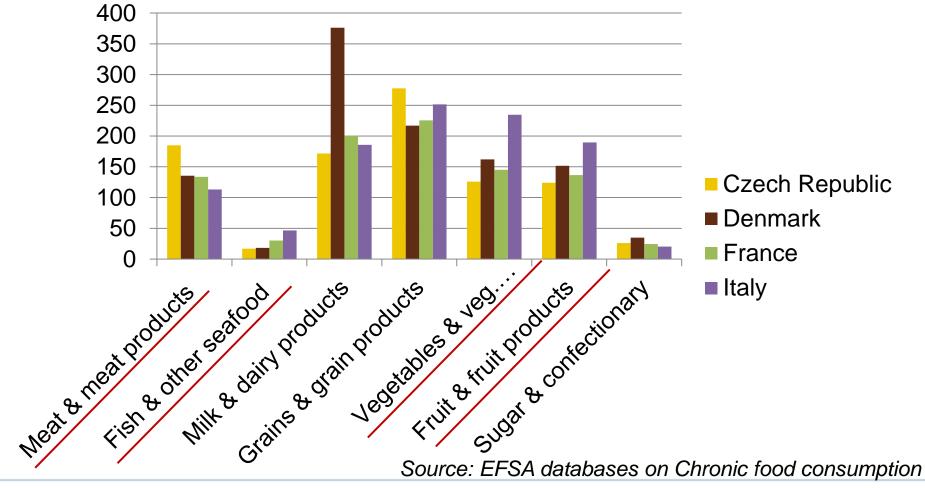








Average consumption of selected foods in some EU countries (g/day/adult)

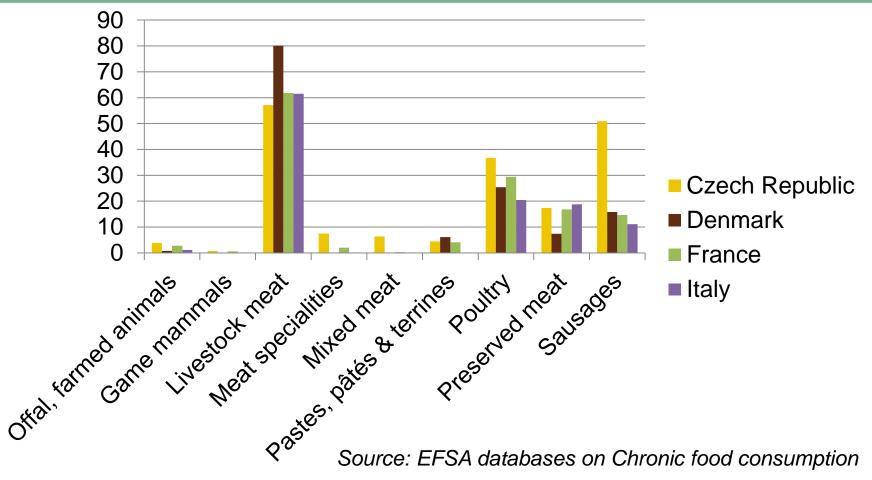








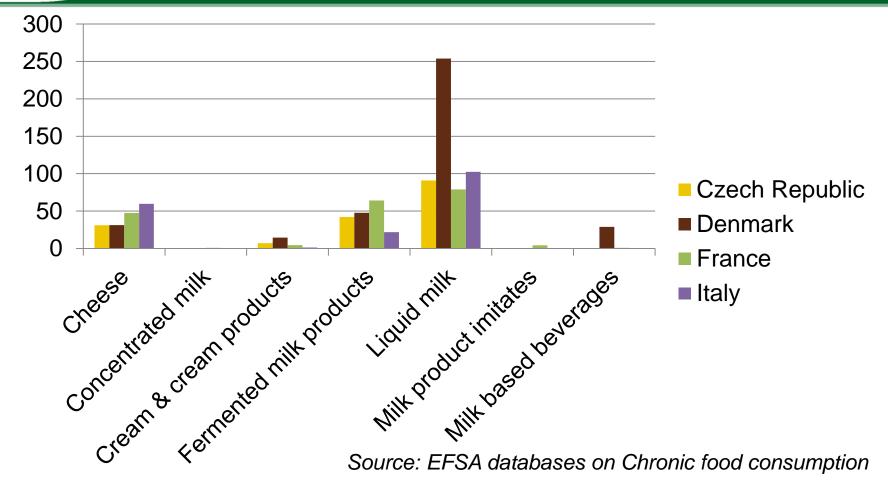
Consumption of meat & meat products (g/day/adult)







Consumption of milk & milk products (g/day/adult)



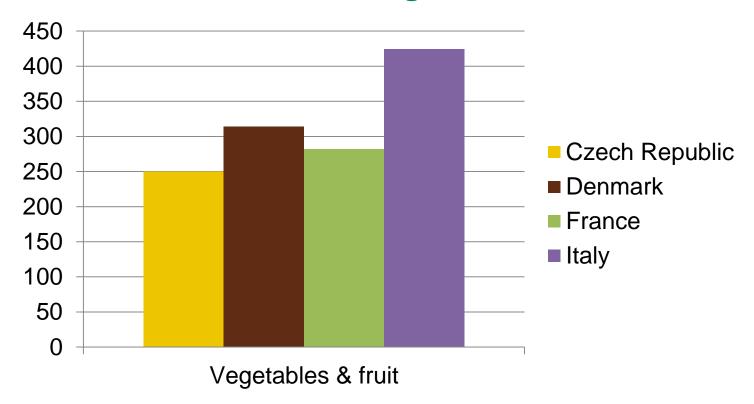






Average consumption of vegetable & fruit in some EU countries (g/day/adult)

Guidelines: 500 or 600 g/d/adult



Source: EFSA databases on Chronic food consumption







Questions to be addressed:

- Which <u>F&NS</u> issues are of interest in relation to the two case studies?
- Which environmental issues are of interest in relation to the production of livestock-fish?
- Which <u>environmental issues</u> are of interest in relation to the <u>consumption</u> of fruitvegetables?
- Which innovative pathways could you suggest to reduce/increase consumption and to overcome the issues?
- Which <u>time lines</u> and other <u>barriers</u> do you envisage in the innovative pathways suggested?
- How would you <u>prioritize</u> the innovative pathways in a <u>long-term sustainable perspective</u> or can we make smart packages of potential innovations?









