

UN FOOD SYSTEMS SUMMIT 2021

Denmark's National Pathway for Food Systems Transformation

Final draft, September 2021

Introduction

Before 2030, we need to transform our food systems to become more sustainable and greener in order to strengthen food security and be able to produce sufficient food for the still growing global population. We need climate adapted agriculture and food systems that more effectively use scarce resources and pollute less in order to improve human health and build resilience to climate shocks and pandemics.

The “Danish National Pathway for Food Systems Transformation” shows how Denmark is committed to reach concrete and scalable results and progress towards the Sustainable Development Goals and the climate goals in the Paris agreement.

The food cluster in Denmark has worked for decades to reduce its environmental impact from agricultural production. It has from 1990 until today decreased its greenhouse gas emissions by 16 percent while production volume has increased by 35 percent. The food system produces enough food to feed 15 million people and thereby provide safe and nutritious food for consumption both domestically and abroad. The value of the exports from the Danish agri-food sector was approximately 23 billion EUR in 2019 and represents 23 percent of total Danish exports of goods.

The Danish government has an objective of doubling the Danish organic area by 2030. Denmark was the first country in the world to introduce an organic logo that guarantees control by national authorities. More than ten percent of all foods sold in Denmark are organically cultivated. In a study published by the World Resources Institute in 2020, Denmark was ranked in top as a global sustainability leader in meat and dairy productions. Furthermore, Denmark was ranked number 1 in World Economic Forum’s 2020 Environmental Performance Index.

A transformation of the Danish food system will contribute to the fulfilment of Denmark’s ambitious climate objectives. In 2019, the Danish Parliament agreed on a national Climate Act with a legally binding target to reduce greenhouse gas emissions by 70 percent by 2030 (compared to the 1990 level). The Climate Act commits current and future climate ministers to reach net zero emissions by 2050 at the latest. Every year, the Danish Government will present Climate Action Programs with concrete political initiatives to decarbonize every sector from transport to agriculture and energy.

The Danish food system contributes directly to Sustainable Development Goals 2, 3, 12, 13, 14 and 17. However, to meet these goals, Denmark must work to overcome challenges within the food system. For example challenges with food loss and food waste, diets that are not in line with health and climate recommendations, and antimicrobial resistance that must be kept in check.

This Danish National Pathway for Food Systems Transformation reflects the Danish priorities and initiatives as of September 2021.

Danish game-changing innovations

In April 2021, Denmark hosted the World Food Summit as well as a Danish National Food Systems Summit Dialogue. Focus was on how to establish pathways for game-changing innovations that are necessary for sustainable food system transformations and progress towards the Sustainable Development Goals. Emphasis was on four game-changing innovations in the areas of:

1. Reduction of food loss and food waste:

A reduction of food loss and food waste can play a significant role in reducing the environmental footprint. This requires a shift in consumption patterns and actions of all actors across the value chain. In Denmark, public-private-partnerships and voluntary agreements, as well as new technology and nudging consumers towards behavioral change are seen as the way forward. Denmark has a national binding target to reduce food waste across all parts of the food value chain. Thereby supporting the Sustainable Development Goal 12.3 of reaching an overall reduction of food loss and food waste by 50 percent. To reach this vision, the Danish government has established a think tank (ONE/THIRD) that brings together stakeholders.

2. Healthy and sustainable diets:

Malnutrition in one form or another affects every country, whether it be undernutrition, micronutrient deficiencies, or overweight and obesity, and some countries are struggling with multiple issues. Food Based Dietary Guidelines can be a powerful driver for healthy and sustainable food consumption and production, and public-private partnerships have the potential to support and accelerate sustainable development. Denmark is paving the way towards more healthy and sustainable diets through a new set of official food-based dietary guidelines, which guide people on how to eat healthier, but also on how to reduce the climate emissions from the food system by transforming eating habits.

3. Prudent use of antimicrobials and prevention of resistance:

Antimicrobial resistance is a serious threat to health, society, and economies worldwide. Over- and misuse of antimicrobials in many aspects of food production accelerates the global threat. Prevention of antimicrobial resistance is essential to ensure safe food for all and effective antimicrobials for the future. This also requires prudent use of antimicrobials in food production and monitoring of antimicrobial resistance. Denmark advocates for a “One Health” approach as well as responsible use. Global cooperation is key to win the fight against antimicrobial resistance, and Denmark will continue to play an active role in international fora on antimicrobial resistance and antimicrobial use.

4. Deforestation-free value chains:

Approximately 80 percent of global deforestation and forest degradation is driven by the expansion of agricultural land for the production of agricultural commodities. Ensuring responsible and deforestation-free value chains requires action from many actors at all levels. Private and public stakeholders, including governments, around the world must address illegal and legal deforestation and ensure that the production of agricultural commodities is undertaken responsibly and deforestation-free. Denmark firmly believes that an integrated and cross-cutting approach is needed. This requires action from all actors along the supply chain from raw materials to dinner tables. Only then will we be able to ensure the benefits for biodiversity, climate change, ecosystems, local communities and human health in general. Denmark is committed to this agenda, and will work to ensure that by 2025, all imports of agricultural commodities such as soy and palm oil will be 100 percent responsible and deforestation-free.

Denmark’s global engagement:

Denmark is supporting game-changing innovations which target fragile and conflict affected areas, such as Anticipatory Action to prevent famines, and School meal programs in developing countries. We need a shift towards anticipatory action and combine humanitarian short-term food assistance with longer-term sustainable solutions. There is a need for resilient food systems that can cope with shocks from pandemics and climate change. Anticipatory approaches to prevent famines and food insecurity are fast, efficient and provide better and more dignified support to those in need. This calls for partnerships, multi-stakeholder approach and investment in preparedness. For anticipatory action to play its role in the best possible way, it must be locally led.

Denmark is supporting World Food Programme’s school meal programs in the Sahel and on the Horn of Africa. Denmark believes that providing school meals protects the most vulnerable children from hunger and malnutrition and constitutes an incentive to keep girls in school. Denmark also recognizes that scaling up school meals is also an investment in learning and human capital. Denmark actively supports the UNFSS School Meals Coalition led by Finland and France and hope to see action towards reestablishing and rolling out school feeding as a safety net in the countries hardest hit by the consequences of COVID-19.

Table 1: Danish game-changing innovations and visions towards 2030

<p><u>Food Loss and Food Waste</u></p> <ul style="list-style-type: none"> • Game-changer: Public Private Partnerships and voluntary agreements • <i>Vision: Significant reduction of food loss and food waste by all actors through a shared understanding of responsibility and willingness in the entire chain to ensure advanced efforts to achieve Sustainable Development Goal 12.3 on reduction and prevention of food loss and food waste.</i> <p><u>Healthy and Sustainable Diets</u></p> <ul style="list-style-type: none"> • Game-changer: Food-based dietary guidelines with a focus on both health and sustainability • <i>Vision: Majority of consumers are regularly enjoying nutritious and sustainable meals by applying food based dietary guidelines constituting a healthy diet from a sustainable food system.</i> <p><u>Prudent use of antimicrobials and prevention of resistance</u></p> <ul style="list-style-type: none"> • Game-changer: Use of surveillance data as a lever/tool to reduce usage of antimicrobials and prevent resistance • <i>Vision: Prudent use of antimicrobials in animals to limit human exposure to antimicrobial resistance through consumption of food.</i> <p><u>Deforestation-free value chains</u></p> <ul style="list-style-type: none"> • Game-changer: Integrated supply chain approach • <i>Vision: All global forest and agricultural value chains are responsible and deforestation-free, without compromising other natural ecosystems.</i> <p><u>Denmark’s international engagement/global scale</u></p> <ul style="list-style-type: none"> • Game-changers: Anticipatory Action to prevent famines, and School meal programs in developing countries • <i>Vision: To reduce the needs for humanitarian assistance, humanitarian actors should continue their engagement in strengthening anticipatory humanitarian action to prevent famines and food crises.</i> • <i>Vision: Denmark sees school meals programs as key to improve nutrition for vulnerable school children and combat child hunger and malnutrition.</i>

Danish Pathways to reach 2030 visions

1. Food Loss and Food Waste

Vision: Significant reduction of food loss and food waste by all actors through a shared understanding of responsibility and willingness in the entire chain to ensure advanced efforts to achieve Sustainable Development Goal 12.3 on reduction and prevention of food loss and food waste.

Strategies to achieve the vision:

- Support civil society's battle against food loss and food waste:
Civil society plays an important role in the fight against food loss and waste. A reduction of the food loss and waste from households is a crucial step towards an overall reduction. The Danish government has launched a recurring national food waste day on 29 September 2021. The celebration will create awareness among the population about the importance of reducing food waste and ensure the Danes' involvement in the fight against food waste. Cooperation with civil society is ongoing.
- The Food Waste Hunters 2.0:
Initiatives like The Food Waste Hunters 2.0, where food businesses are offered professional assistance to reduce food waste at retail and wholesale. The assistance consists of consultants who, with advice and guidance, are to help food businesses reduce their food waste.
- Donation:
In Denmark, donation is seen as an option when reduction is not possible. Focus is on removing legislative barriers and under the auspices of the think tank (ONE/THIRD) relevant actors have initiated work to draft guidelines for donors and recipients, containing all relevant information on donating surplus food.
- Research:
Research has been initiated to clarify what triggers food waste in households as well as mapping of value chains for food in Denmark with a focus on the causes of waste in the product types "fruit and vegetables", "bread", "meat products" and "dairy products" across the value chain links.

Partnerships and stakeholder involvement:

- More Public Private Partnerships and enablement of new technology are important steps. A Public Private Partnership should include voluntary agreements with joint reduction targets based on the "target, measure act" approach where members will measure and reduce their food waste and report their data. This will create an understanding by each actor involved and improve evidence and data as well as demonstrate the power of a united effort against food loss and waste. Furthermore, it will promote reduction as a meaningful business case.
- The Danish Government has established a think tank on Prevention of Food Loss and Food Waste (ONE/THIRD). The think tank brings together research institutions, public authorities, food businesses and organizations to advance efforts to achieve Sustainable Development Goal 12.3. The think tank operates a voluntary agreement that brings together the industry and organizations across the value chain to reduce food waste in accordance with Sustainable Development Goal 12.3 from farm to fork. Many of the largest Danish food businesses, producers, retailers and catering companies have already pledged to measure and reduce their food waste and loss.

2. Food Based Dietary Guidelines

Vision: The majority of consumers are regularly enjoying nutritious and sustainable meals by applying food based dietary guidelines constituting a healthy diet from a sustainable food system.

Strategies to achieve the vision:

- **Develop Food Based Dietary Guidelines:**
The Danish government has developed new Food Based Dietary Guidelines constituting a healthy diet from a sustainable food system. By following these Food Based Dietary Guidelines the climate food print of food consumption can be reduced with more than 1/3.
- **Consider consumer behavior:**
It is crucial to develop culturally/socially adapted and population-specific Food Based Dietary Guidelines. Carry out research in consumer behavior in the specific target context and develop setting-specific Food Based Dietary Guidelines for meals served in kindergartens, schools, educational institutions and work places.
- **Introduce the Food Based Dietary Guidelines comprehensively:**
Make the Food Based Dietary Guidelines easily understandable and applicable and visually attractive and inspiring.
- **Ensure local availability and affordability:**
Invest in development and promotion to ensure a large variety of quality protein crops by introducing local production of such crops. Make sure that foods compliant with the Food Based Dietary Guidelines are available, attractive and affordable.
- **Communicate and educate consumers to adopt Food Based Dietary Guidelines:**
A clear implementation plan should be developed. Educate and inspire all the food system actors, including health workers, chefs, teachers and food producers, farmers, about the Food Based Dietary Guidelines and their implications and advantages in an ethical way, but simultaneously also conduct massive behavior change campaigns reaching. Take many diverse approaches to nudge consumers in using the Food Based Dietary Guidelines. The best practices of effective nudging should be shared globally. Avoid labelling consumers; focus on the action, not on the identity.
- **Promote green public food procurement:**
Invest in the development of green public food procurement. Setting minimum criteria for sustainable public food procurement.
- **Consider barriers:**
Current dietary habits, including a high intake of meat as well as sweet, salty and fatty foods, and a low intake of legumes may be a major challenge. The dietary habits have to change significantly to apply to the Food Based Dietary Guidelines. Furthermore, the population do not necessarily have sufficient knowledge and practical cooking skills, e.g. with regard to legumes and other sources of plant based proteins. Finally, is availability and affordability of tasty foods compliant with the Food Based Dietary Guidelines crucial to achieve the vision. All actors across the food supply chain must work together to ensure this.

Partnerships and stakeholder involvement:

- Strategic partnerships with all actors of the food supply chain and food system should be established. All sectors should follow the principles behind the Food Based Dietary Guidelines, from the farmers, food processing industry to the finance sector.
- Sustainable eating habits in line with Food Based Dietary Guidelines should be a driver for and interlinked with an agricultural policy promoting a sustainable food system.
- Healthy food environments should be established and be based on a system approach. Efforts should be made, to initiate and support a movement of 'food environment actors', setting high ambitions and targets (across the food system) with the objective to make foods for healthy and sustainable diets the easiest and normal choice.

Antimicrobial resistance

Vision: Prudent use of antimicrobials in animals to limit human exposure to antimicrobial resistance through consumption of food

Strategies to achieve the vision:

- Work in a One Health perspective:
Denmark's One Health Strategy against antimicrobial resistance sets the frame for the national objectives to reduce the consumption of antimicrobials and prevent resistance in relation to humans and animals. The Danish Veterinary and Food Administration's action plan for antimicrobial resistance in production animals and in food 2021-23 describes planned activities in detail.
- The Danish integrated Antimicrobial Resistance Monitoring and Research Programme (DANMAP) presents data on antimicrobial use and antimicrobial resistance, and contributes to understanding of the associations between antimicrobial use and the occurrence of antimicrobial resistance across populations. Denmark works for easy access to antimicrobial use and antimicrobial resistance data across sectors and implementation of improved methods for antimicrobial resistance surveillance. Denmark continues the close cross-sectoral cooperation between authorities, health sector, research institutions and the food industry.
- The 'Yellow Card Initiative':
The initiative regulates the level of antimicrobial use in pig farms. Furthermore, owners of large farms are obliged to sign a veterinary advisory service contract with their herd veterinarian, owners of small farms can sign on a voluntary basis. Veterinary advisory service contracts involve frequent vet visits to the farm. The intention is to direct focus to veterinary advice and the prevention of diseases, rather than on treatment, to ensure prudent use of antimicrobials and thus minimizing antimicrobial resistance, as well as improving animal welfare. Danish veterinarians cannot profit from antimicrobial sales. This supports the focus on prevention of disease.
- Work within the EU framework:
Healthy livestock is the basis for low consumption of antimicrobials, contributes significantly to good animal welfare and is a prerequisite for resource-efficient and sustainable production as well as good production economy. The EU Commission has set targets to reduce the use of antimicrobials in farmed animals and aquaculture by 50 percent by 2030 in the Farm to Fork strategy. Denmark aims for a continued low presence of antimicrobial resistance in food, with a specific focus on resistance towards critically important antimicrobials. Thus, Denmark strongly supports the EU's ambitious goal and aims for continued reduction of antimicrobial use for farmed animals.

Partnerships and stakeholder involvement:

- Global cooperation is key in the fight against antimicrobial resistance. Denmark will continue to play an active role in international fora (e.g. CODEX Alimentarius and OIE) on AMR and antimicrobial use. Denmark also maintains a strong collaboration with the other Nordic countries and the EU. Denmark supports specific antimicrobial resistance projects in partnership with selected low and middle-income countries.
- Denmark has taken the initiative to establish the International Centre for Antimicrobial Resistance Solutions (ICARS) to find solutions to ameliorate antimicrobial resistance in developing countries.
- Towards 2030, Denmark will continue to promote prudent and reduced use of antimicrobials in animals to limit human exposure to resistant bacteria, with emphasis on collaboration with stakeholders in the veterinary, food, human and environmental sectors, in a "One Health" approach. Denmark mitigates the risk of antimicrobial resistance through evidence-based decisions.

4. Deforestation-free value chains

Vision: All global forests and agricultural value chains are responsible and deforestation-free, without compromising other natural ecosystems.

Strategy to achieve the vision:

- The Danish Government is committed to the protection of nature and to halting deforestation and forest degradation. Deforestation and forest degradation is closely connected to the production of agricultural commodities. Therefore, in order to ensure higher biodiversity, the fight against climate change and fulfil the needs of local communities and indigenous peoples who depend on forests, we must support and promote responsible and deforestation-free value chains for agricultural commodities globally. To achieve this, we must cooperate closely with actors at all levels along the value chain, including governments from both key producer and consumer countries, the private sector and civil society.
- The Danish Government has launched a national action plan on deforestation. The action plan contains a range of initiatives that all seek to address deforestation and forest degradation resulting from the Danish import of agricultural commodities at a national, European and international level. Among these initiatives is the implementation of a deforestation-free policy for public procurements of soy and palm oil. The national action on deforestation includes an ambitious vision of ensuring 100 percent responsible and deforestation-free imports of agricultural commodities such as soy and palm oil by 2025.
- At a regional, European level, Denmark is working to ensure effective and ambitious legal and voluntary measures on deforestation in order to reduce the pressure on the world's forests, while creating a level playing field for businesses across Europe.
- The Danish Government will also work closely with its international partners, bilaterally and regionally as well as through the Amsterdam Declarations Partnership and UN-forums and conventions such as the UNFCCC and UNCBD in order to support and promote responsible and deforestation-free value chains.

Partnerships and stakeholder involvement

- Denmark firmly believes that an integrated and cross-cutting approach is needed in order to ensure responsible and deforestation-free value chains for agricultural commodities globally. This requires close collaboration with stakeholders from both the private sector and civil society.
- Therefore, the Danish Government participates in several national multi-stakeholder initiatives, including the Danish Alliance for Responsible Soy and the Danish Alliance for Responsible Palm Oil. Denmark also engages with international stakeholders through the Amsterdam Declarations Partnerships and Alliance for the Preservation of Rainforests.

Denmark's global engagement

Our world today is closely linked and we live in a time of global upheaval. The COVID-19 crisis, climate change and conflicts reverse progress and development. Poverty and inequality are on the rise. Far too many people are left behind, particularly in fragile and conflict affected areas. Both rich countries and developing countries are a long way from achieving the UN Sustainable Development Goals and fulfil the Paris Agreement's climate ambitions. Therefore, the UN Secretary-General has proclaimed that the remaining 10 years up until 2030 will be the 'Decade of Action'. International solidarity is the answer to these global challenges. We need to accelerate progress to achieve our joint goals. This is a joint responsibility, and Denmark is a strong supporter of the 'Decade of Action'. Denmark plays and will continue to play a key role in international development cooperation policy, charting new paths and inspiring other and bigger countries and economies to follow.

With the new development strategy "The World We Share" the direction for Danish development cooperation for the next four years is set. Focus is on the major challenges of our time: Climate, fragility and human rights. For Denmark it is important to prevent and fight poverty and inequality, including gender inequality, conflict and fragility, displacement and irregular migration. First and foremost by creating hope and opportunities for the individual. And by supporting the building of just and resilient societies. Girls and women's rights remain a cross-cutting priority in our humanitarian work and development interventions. Denmark wants to lead the fight to stop climate change and restore balance to the planet. We must create a planet in balance with a richer and healthier natural environment. Denmark wishes to create hope and help more people better in the world's most challenging areas.

The majority of people in poor countries are engaged directly or indirectly in agriculture and food production, which are increasingly impacted by climate change. Without adaptation, climate change and the biodiversity crisis will destroy the livelihoods of many people. At the same time, the rapidly growing population in many countries puts a heavy strain on natural resources. Action needs to be taken to protect and restore nature and ecosystems such as forests, wetlands and oceans.

For Denmark it is a priority to support climate-smart agriculture and sustainable food systems, prevent food loss and food waste, promote agro-organic cultivation methods, and strengthen green value chains. This will build resilience, improve food security and generate employment. To work to ensure that agricultural goods are produced in a sustainable and healthy way in developing countries. This means, for example, without causing deforestation in producer countries that damages climate, biodiversity and social conditions. To contribute to sustainable and socially just economic recovery and green transition after the COVID-19 crisis. And to focus on creating hope and opportunities through decent jobs and green growth.

As part of our global joint responsibility, Denmark is supporting the UN Food System Summit Trust Fund to implement National Food Systems Summit Dialogues in developing countries and the development of their national pathways towards sustainable food systems. The objective of the Danish support is to achieve more sustainable and greener food systems in developing countries, and hence to give hope and development and to reduce hunger and malnutrition.

Conclusion

Denmark is committed to reach concrete and scalable results and progress towards the Sustainable Development Goals and the climate goals in the Paris agreement. The Danish National Pathway for Food Systems Transformation shows how Denmark is focusing on food waste and food loss, food based dietary guidelines, reduction of antimicrobial resistance and deforestation-free value chains in order to reach the 2030-visions. Important elements are public-private partnerships, stakeholder involvement and scientific evidence. On a global scale, Denmark also focus on anticipatory action to prevent famines and school meals in developing countries.

To reach food system transformation it is necessary to mobilize and motivate all stakeholders for collective action. Public-private partnerships has been and will continue to be a strong Danish priority. This includes strong partnerships between government, local partners, businesses, farmers and investors, and science groups. Stakeholders need to work well together for collective action.

Denmark has engaged actively in the UNFSS Action Tracks and will continue to focus on coalitions that correspond to Danish game-changing areas and priorities. In particular, Denmark will engage actively in the “Healthy Diets coalition” with a focus on food based dietary guidelines and partnerships. Other coalitions of particular relevance to Denmark is “Food is Never Waste” and “School Meals”. Denmark will closely follow the development of all coalitions and consider engaging in additional ones.

This final draft version of the Danish National Pathway for Food Systems Transformation reflects the Danish priorities and initiatives as of September 2021. It will be updated towards 2030.