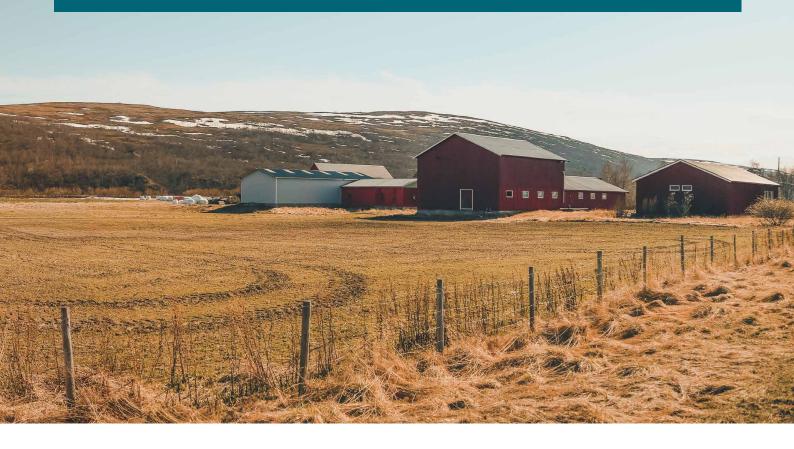
## The Nordics: Food and Land Use



## Context

The food and land use systems of the Nordic region (Denmark, Finland, Iceland, Norway and Sweden) are complex and diverse. Denmark has the largest agricultural system – covering over 60 percent of its land area and accounting for nearly one-quarter of its export value. In contrast, only three percent of Norway's land is fit for agricultural use, whereas the country is the world's second-largest exporter of seafood. Iceland is limited in its agricultural production by geographic conditions yet uses abundant and renewable geothermal energy to grow a wide variety of fruits and vegetables in greenhouses. Finland is one of the most heavily forested countries of the European Union, with its forestry sector accounting for over 20 percent of the country's export revenue. Land use in Sweden ranges from the heavily forested north to intensive interspersed agriculture and a robust dairy sector.

Across the Nordic region, unhealthy diets contribute to obesity and diet-related chronic diseases that come at a high cost to the individual and public sector. Typical Nordic diets also contribute to high overall environmental impact. Recent research shows that the production of the typical Nordic diet produces 2.5 to three times the greenhouse gas emissions, and uses approximately twice the amount of cropland, as would be considered sustainable if global food system targets were scaled down to an equal per capita scale. Notwithstanding the abundance of water in the region, it also faces important water management issues, including pollution of the Baltic Sea, owing in part to run-off from agricultural inputs. Finally, the Nordic region has high levels of food waste - approximately 120 kilograms per person a year.

## **Critical transitions**

All ten critical transitions in the global report need to be addressed in the Nordic countries. The following five are among the most pressing:

1

Healthy diets. The Nordic Nutrition Recommendations, developed by over 100 scientists, now include sustainability considerations, and feed into a whole-of-government approach intended to ensure better nutrition across the region. A regional "keyhole label" on foods is driving healthier choices, while the Wholegrain Partnership in Denmark promotes greater production and consumption of wholegrain products. Sweden and Finland have strong national programmes to offer healthy, tasty and sustainable food in schools.

Protecting and restoring nature. The Nordic countries are committed to the fulfilment of the Aichi biodiversity targets on biodiversity, which will require greater investment in the extent and management of protected areas on land and sea, as well as enhanced biodiversity conservation and management across the economy. The Svalbard Global Seed Vault, housed on the Norwegian island of Spitsbergen, is a globally significant effort to protect and secure the world's biological and seed diversity in perpetuity.

3

Healthy and productive ocean. Ecosystem-based approaches to marine management – including integrated management plans and spatial planning – are being developed and implemented across the region. The Nordic countries are party to the Central Arctic Ocean agreement to prevent unregulated fishing and apply precautionary conservation and management measures in the waters of the Central Arctic. They are exploring the inclusion of explicit spatial protection commitments in their fishery management plans and the adoption of strict purchasing standards governing seafood imports. And they are seeking to pivot to more sustainable aquaculture systems, given ambitious 2050 production goals and the significant environmental impacts currently caused by aquaculture.

Food loss and waste. Approximately 3.5 million tonnes of food are wasted each year across the Nordic region. Each country has committed to halving waste by 2030, whether through government-led initiatives, public-private partnerships or voluntary, multi-stakeholder initiatives such as Denmark's national awareness-raising campaign, "Stop Spild Af Mad".

5

2

Local loops and linkages. Finland's Roadmap to a Circular Economy has prioritised food and land use for action, addressing issues including transport, phosphorus, microbiome management and reductions in single-use plastic packaging. The region is also a global leader in enhancing management of boreal forests to secure greater carbon sequestration, and in the use of engineered wood as a substitute for cement and steel in buildings.