As global trade markets have expanded, there has been an increasing volume of agricultural commodities and food products imported to, and exported from, the United Kingdom (UK). In response to these market and political changes, standards for imported foods are being implemented to control the trade of goods and services.

Alongside the development and implementation of standards for imported foods, there has been a growing public desire to understand where the food we eat comes from, and increasingly, to understand not just the safety of food, but the inter-country variation in the sustainability of food production practices. For example, is a product sourced from one country comparable to another country in terms of animal welfare, environmental sustainability (for example, greenhouse gas emissions, deforestation, biodiversity etc.) and nutritional composition.

To inform future research needs, the Food Standards Agency required a detailed understanding of the current data and literature landscape regarding imported food standards, with a particular focus on data availability around three themes: animal welfare, environmental sustainability, and nutritional composition. Data on food safety was not considered as part of the review as this has been well documented in previous research by the Food Standards Agency.

To achieve the research needs, a review was undertaken to explore and assess measurable metrics, which could be used to measure and monitor the consistency or differences of imported food production standards across the three themes. The assessment of each theme was coupled with parameters relevant to imported food products consumed in the UK. In addition, the research aimed to inform data gaps and requirements.

The information outlined in this report provides an independent assessment of how the three themes are currently considered within international imported food standards and trade agreements. The outputs will inform the Food Standard Agency’s 2023 Annual Review of Food Standards across the UK.

The research reviewed a large range of materials, from scientific literature, international trade agreements, country import standards, as well as voluntary sustainability assurance schemes. Whilst a range of imported food production standards were reviewed, free trade agreements
FTAs) were found to be the main source of data and information, although this was largely limited and high-level in scope. For example, whilst some FTAs include chapters on animal welfare (for example, UK and New Zealand FTA, and UK and Australia FTA), and environmental sustainability (for example, UK and New Zealand FTA, and European Union and New Zealand FTA), there was limited scope in the data and literature relating to specific metrics that could be readily extracted for use by the Food Standards Agency.

Additionally, food assurance schemes were identified as a useful source of potential data and farm metrics, although these tended to be broad in geographic scope and sit below country-to-country agreements. For example, there are metrics being developed in assurance schemes and programs, such as the global farm metric, which offer the opportunity to function as a proxy to promote high standards of production for imported food through requirements to meet specific compliance criteria. Assurance schemes provide one mechanism to support the baseline inter-country alignment of food quality metrics relating to animal welfare, environmental sustainability, and nutritional composition.

In conclusion, this research demonstrated that data availability and metrics for measuring the three themes is limited and not readily available within imported food production standards, particularly when considering data and information that would enable measurement and comparability to UK production practices. However, opportunities for data collection needs to support this research area in the future have been identified.

Data which would be of value to collect and analyse, with the potential for conversion into measurable metrics, for each theme include:

**Animal Welfare**: non-binding governance (for example, best practice code), mortality and pain relief metrics, national / regional quality assurance schemes, global quality assurance schemes, welfare dashboard, carcass assessments, Closed Circuit Television in Slaughterhouses, animal protection index and World Organisation for Animal Health global standards.

**Environmental sustainability**: biodiversity indices (which provide tangible, mathematical measures of diversity), targets for fertiliser and pesticide usage reductions (as stated in the European Union green deal), soil sampling analysis (to prescribed depths and across multiple sampling locations to provide thorough and representative data on contamination or carbon content), water sampling analysis (this is the systematic sampling of water courses to check contamination levels and sources of contamination to assess water quality), and greenhouse gas emissions per kilogram of production (for example, metrics that quantify the climate impact resulting from the production of a kilogram of an agricultural food stuff).

**Nutritional composition**: Whilst no existing data sources were identified in this research from which to collect information, data which would be of value to collect and analyse for nutritional composition include rear of pack labelling standards, front of pack labelling standards, nutrient testing schemes, and product formulation uniformity.

**Key messages**

The presence of existing data sources to assess the quality of imported food and its production standards is limited given the scarcity and lack of consistency in data.

Assurance schemes offer the opportunity to function as a proxy to promote high standards of production for imported food through listed compliance criteria requirements.