

One third of UK fruit and vegetables are imported from climate-vulnerable countries

November 9 2020



Credit: Pixabay/CC0 Public Domain

The UK's supply of fruit and vegetables has become increasingly reliant on imports from countries vulnerable to climate change, according to a new study in *Nature Food*.

The research, led by the London School of Hygiene & Tropical Medicine (LSHTM), involved analyzing open-source data on food trade from 1987-2013. They estimated that the domestic contribution to total fruit and [vegetable](#) supply in the UK has decreased from 42% in 1987 to 22% in 2013, while at the same time imports of fruit and vegetables from climate-vulnerable countries have increased from 20% in 1987 to 32% in 2013.

The team found that the variety of fruits and vegetables imported into the UK has increased, and that there have been major shifts in the types of fruits and vegetables supplied to the UK market: tropical fruits have become more popular, but the supply of traditional vegetables has significantly declined.

In 1987, 21 crops comprised the top 80% of total fruit and vegetables supplied to the UK, and this rose to 27 in 2000 and 34 in 2013. The supply of pineapples increased from 0.9% to 1.4% of overall fruit and vegetable supply, and bananas from 3% to 7.8%, over this period.

Cabbages declined from 7.5% in 1987 to 2.5% of overall fruit and vegetable supply, peas from 5.0% to 1.3% and carrots from 7.0% to 5.8%.

Given the projected trends in [global climate change](#), the researchers say that increased reliance on fruit and vegetable imports from climate-vulnerable countries could have a negative impact on the availability, price and consumption of fruit and vegetables in the UK. The researchers used a range of indices to assess the vulnerability of countries to current and future climate change. The analysis suggests that the most affected groups are likely to be people in low-income households.

Fruit and vegetables are key components of healthy diets, but globally

their consumption is well below current international dietary recommendations. Just 30% of adults and 18% of children eat the recommended five portions of fruit and/or vegetables per day in England. Fruit and vegetables also typically have lower environmental footprints than animal sourced food and this dual contribution to health and sustainability is becoming increasingly recognized.

Dr. Pauline Scheelbeek from LSHTM's Centre on Climate Change & Planetary Health, who led the study, said: "The UK's current trade patterns and climate change means the supply of fruit and vegetables in the UK is not secure. The recognition that trade is a key component of food system resilience is therefore vital information for policymakers.

"The increased reliance on fruit and vegetable imports from climate-vulnerable countries will, if no adequate [climate change](#) adaptation measures are taken in the production countries, lead to fruit and vegetable supply problems in the UK and potentially affect price and consumption of such foods. This could be a major challenge in our efforts to promote higher fruit and vegetable consumption in the UK, both for health and environmental reasons."

Professor Alan Dangour, Director of the Centre on Climate Change & Planetary Health at LSHTM, said: "It is very clear from the underlying trends in food production and trade that the UK is increasingly reliant on climate-vulnerable countries for its supplies of fruit and vegetables. The government cannot ignore these trends or it will be failing in its primary duty to protect its people from future shocks. I call on the government to do more now to support national food production, build resilience into the national [food](#) system and ensure the supply of healthy and sustainable diets for all."

The research team say that the results are particularly important in the light of several government-led programs, such as the UK's National

Food Strategy, the National Determined Contributions of the UK, and the Obesity Strategy, as well as ongoing Brexit trade negotiations.

Dr. Pauline Scheelbeek, said: "The implications of vulnerability of our trade strategy cuts across traditional policy silos such as diets, health, agriculture, economy and the environment. We need to rethink our trade strategy to reduce dependency on climate vulnerable countries, import responsibly and look into possibilities to enhance consumption of sustainably grown [fruit](#) and vegetables, including those produced in the UK."

The study is subject to some limitations. The openly available trade data relies on reporting from individual countries, which may vary in quality. The indices used to determine [climate](#) vulnerability are modeled estimates and determined at country level: the vulnerability of the specific locations of crops production may not be the same as the country average.

More information: Scheelbeek, P.F.D., Moss, C., Kastner, T. et al. United Kingdom's fruit and vegetable supply is increasingly dependent on imports from climate-vulnerable producing countries. *Nat Food* 1, 705–712 (2020). doi.org/10.1038/s43016-020-00179-4

Provided by London School of Hygiene & Tropical Medicine

Citation: One third of UK fruit and vegetables are imported from climate-vulnerable countries (2020, November 9) retrieved 24 April 2024 from <https://phys.org/news/2020-11-uk-fruit-vegetables-imported-climate-vulnerable.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.