Today, China is both the world’s largest agricultural producer and its largest agricultural importer. In absolute terms, food system greenhouse gas emissions in China are larger than those in any other country, constituting nearly 5 percent of total global emissions. The country feeds a fifth of the world’s population with less than 10 percent of its arable land.

Agriculture, forestry, and fishing represented 7.3 percent of China’s GDP in 2021. In 2020, the agricultural sector employed 24 percent of China’s workforce (177 million people).

Food-Related GHG Emissions China’s agri-food system emitted 1.9 billion tons of CO2eq in 2019, accounting for 14 percent of the country’s total GHG emissions that year. 58 percent of these emissions came from pre- and post-production activities (e.g., food packaging and transport) and 42 percent came from farm-gate activities (e.g., rice cultivation, enteric fermentation). Land use change made up less than 1 percent of all agri-food GHG emissions (Figure 1).

Production China is the world’s largest producer of agricultural products. In 2019, China produced an estimated 24 to 32 percent of all agricultural products globally by value. In 2020, China produced 38 percent of the world’s pork and 13 percent of the world’s chicken by volume.

Consumption Aggregate grain consumption tripled between 1975 and 2018. Nationally, meat consumption skyrocketed, increasing 14-fold during the same period. In 2019, China consumed 64.4 kilograms of meat per capita, higher than the global average and roughly half of that of the United States. By 2021, China was the world’s largest meat consumer. China’s population has become more prosperous, dietary consumption has increased.
**Trade**  China has been a net food importer in recent years. China was the largest importer of agricultural products between 2017 and 2020. In 2021, China imported 220 billion USD of agricultural products, including 54 billion USD worth of soya beans and 32 billion USD worth of meat products. Importing these agricultural products contributes to GHG emissions abroad. One study found that Chinese soy imports were responsible for 6.5 Mt of CO2 emissions, largely linked to deforestation, in Brazil in 2017.

China was the fifth largest exporter of agricultural products between 2015 and 2020. In 2021, China exported 84 billion USD of agricultural goods, including 22 billion USD in aquatic products and 12 billion USD worth of vegetables.

**Policy Environment**  Table 1 summarizes the objectives of a select set of core policy documents related to China’s agriculture and climate change goals.

<table>
<thead>
<tr>
<th>Policy Document</th>
<th>Food system objectives (not exhaustive)</th>
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| National Food Security and Mid- and Long-term Planning Outline (2008) | • Protect food production resources  
|                                                                                                           | • Promote consumption of healthy foods  
|                                                                                                           | • Reduce food chain waste                                                                                     |
| Nationally Determined Contributions (2015 & 2021)            | • Develop lower-carbon agriculture and foodservice processes  
|                                                                                                           | • Improve agricultural climate zoning  
|                                                                                                           | • Return farmlands to forest and grasslands  
|                                                                                                           | • Improve food waste and recycling systems                                                                 |
| Clean Plate Campaign (2021)                                  | • Enhance public awareness of food waste and food security                                                  |
| 14th Five-Year Plan for Economic and Social Development and Long-range Objectives through the Year of 2035 (2021) | • Modernize the agricultural sector by 2035  
|                                                                                                           | • Accelerate the development of smart agriculture and promote the digital transformation of agricultural production  
|                                                                                                           | • Build a national food security industry belt  
|                                                                                                           | • Promote water-saving renovation  
|                                                                                                           | • Promote the green transformation of agriculture (e.g., strengthen environmental protections for agricultural production areas) |
| Anti-Food Waste Law (2021)                                   | • Outline a basic code of conduct for entities including government, enterprises, schools, and the food services to improve food procurement, management, and preparation |
| Action Plan for Carbon Dioxide Peaking Before 2030 (2021)    | • Reduce food waste in the catering industry  
|                                                                                                           | • Develop energy-saving, low-carbon greenhouses  
|                                                                                                           | • Promote the use of energy-saving, eco-friendly cookers, electric agricultural vehicles, and energy-saving, eco-friendly agricultural machinery and fishing boat |
| Implementation Plan for Emission Reduction and Carbon Sequestration in Agriculture and Rural Areas (2022) | • Ensure all national policies align with carbon peaking and carbon neutrality goals  
|                                                                                                           | • Identify ten major action areas, most notably: methane reduction in rice fields; fertilizer reduction and efficiency enhancement; carbon emission reduction from livestock and poultry; and sink improvement in fisheries |

Table 1: Select Chinese policies related to agriculture and climate change
Food and Climate Country Spotlight: China

Contributing authors

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Icons:
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• “Hot soup” by BomSymbols from Noun Project
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