

China: Food and Land Use



Chen Li (on the left) and Li Jian (on the right) working in the Beijing Farmers Market shop in the Jin Xing Yuan residential area of Beijing, China.

Context

China is a vast country of 9.6 million square kilometres that has made great strides in feeding its population of 1.4 billion people – 18 percent of the global population – on only nine percent of the world's arable land. At the same time, it faces enormous environmental challenges related to food production, including climate change, declining arable land area, groundwater depletion, water pollution, widespread soil degradation and pollution, and over-use of chemical fertilisers and pesticides. The country's nutrition and health challenges are also growing, following its recent transition from a traditional diet high in fibre and fresh vegetables to a high-fat, high-salt and low-fibre model with rising amounts of ultra-processed and fast food. About 11 percent of the population is now diabetic and 12 percent obese. Food loss and waste is also a significant problem – consumers in big cities alone waste enough food to feed 30 million to 50 million people.

Agriculture contributed 7.2 percent of China's GDP in 2018, with total agricultural imports of about \$137 billion and exports of about \$80 billion. As the largest agricultural market in the world, China has major impacts on other countries. For instance, it is the largest importer of timber and soy (accounting for two-thirds of global soy imports) and the second-largest importer of beef, palm oil and lumber – all commodities that lead to deforestation.

In recent years, China has made progress on afforestation and "ecological zoning" to protect critical habitats, important in a megadiverse country that is home to ten percent of the planet's plant species and 14 percent of its animal species. China has also taken steps to reform agricultural subsidies. Since 2015, subsidies and preferential policies on electricity, gas, transport and tax incentives for chemical fertiliser production have been gradually reduced or cancelled, leading to a decline in chemical fertiliser use. Since 2017, pilots have been rolled out in 100 counties to replace chemical fertiliser with organic fertiliser.

Critical transitions

Each of the ten critical transitions is addressed by government policy. Priority transitions identified by FOLU China include:

1

Healthy diets. China's revised Dietary Guidelines for Chinese Residents (2016) and the Food Pagoda, a visual guide to the different food groups, provide a solid foundation for healthy diets and are widely available in schools and the health care system. Further measures are needed to limit growth in meat consumption and curb consumption of the ultra-processed foods and fast foods that are leading to rising rates of obesity, diabetes and other non-communicable diseases.

2

Productive and regenerative agriculture. A combination of top-down and bottom-up initiatives are contributing to the spread of productive and regenerative agriculture in China. As well as policies to curtail chemical fertiliser subsidies and promote the use of organic fertiliser, initiatives include increasing the use of crop residues, promoting crop rotations and fallowing, and establishing 40 sustainable agriculture demonstration sites around the country. At the same time, a growing number of new farmers – many of them young and college-educated – are establishing ecological farms and supplying the burgeoning domestic market for sustainably produced foods. Improved rural infrastructure, health care and educational facilities are needed to keep these new farmers in the countryside.

3

Protecting and restoring nature. China plays a pivotal role in the supply and demand dynamics for key agricultural and forest commodities that are associated with deforestation, such as soy, palm oil, beef and timber. As such, a commitment to ecologically friendly supply chains on the part of corporate and government actors, through sustainable sourcing, procurement and other measures, could make an enormous contribution to curbing deforestation around the world.

4

Food loss and waste. China has set targets of reducing annual food losses by 13 million tonnes by 2020 – a 40 percent drop compared with current levels. To achieve this target, the country has adopted measures to reduce food losses at source and from processing, circulation, transportation and consumption. For instance, by investing in advanced grain storage equipment, storage losses have already fallen by six percent compared with the national average before 2015.