



Organic Agriculture in China

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Abstract

China is a world leader in organic agriculture. China is fourth in the world on the basis of certified organic hectares, with 3,589,807 hectares (after Australia, India, and Argentina). China is the third largest market for organic food with €15.463 billion annual retail sales (after USA and Germany). China is the world leader in organic cereal hectares at 2,009,240 ha (followed by USA and Germany). China is the world leader in organic aquaculture with an annual production of 878,000 tonnes and accounting for 83% of global organic aquaculture (followed by Norway and Ireland). China is second in the world for organic wild collection hectares at 3,306,000 ha (after Finland, and followed by Zambia). China is the world leader in organic arable land at 2,981,454 ha (followed by USA and France). China is the world leader in temperate fruit organic area at 103,739 ha (followed by Germany and France). China is the world leader in organic oilseeds hectares at 606,853 ha (followed by USA and Ukraine). China has the world's fourth largest organic vegetable hectares at 40,697 ha (after USA, Italy, and Poland). China is the second largest exporter of organic produce to the European Union at 239,023 tonnes (after Ecuador, and followed by Ukraine). The global total of certified organic hectares is 99,891,258 ha and accounts for 2.1% of global agricultural land with a production value of €144.9 billion. China's growth and development of organic agriculture is congruent with the 14th Five Year Plan of the National People's Congress. China has a novel and well developed Green Food certification protocol that offers producers a 'half-way-house' between organic and chemical farming practices. Green Food certifies 10.55 million hectares and is a potential step-up pathway to transition to organic as well as a step-back pathway for organic producers.

Keywords: Certification, Organic Food, Green Food, Provenance, Exports, World.

INTRODUCTION

More than a century ago the agricultural practices of China were identified by Franklin King as sustainable and worthy of emulation (King, 1911; Paull, 2011). Shortly after the development of synthetic fertilisers by Fritz Haber and Carl Bosch (Haber, 1920; Smil, 2001), the New Age philosopher Rudolf Steiner called for a refocussing of farming practices onto biology rather than chemistry (Steiner, 1924). Steiner's characterised 'the farm as an organism'. This characterisation was developed by an Oxford agriculturalist, Lord Northbourne, in his 1940 book 'Look to the Land', as 'organic farming' which he contrasted to 'chemical farming' (Northbourne, 1940; Paull, 2014a).

Organic agriculture is now a differentiated agriculture practiced in 183 countries; it accounts for almost a billion organic certified hectares (98.9 million ha), 2.1% of global agricultural land, and annual retail sales of €145 billion (US\$171 billion; wise.com) (Willer, Schlatter, & Trávníček, 2026). Organic agriculture excludes: synthetic fertilisers,

pesticides, genetically modified organisms (GMOs), antibiotics, irradiation, and nanotechnology. Certified organic food sells at a premium price and bears a certifier mark (Paull, 2009). The reasons customers give for purchasing organic are: better for themselves, better for their family, better for the planet, and better for farm animals (ACNielsen, 2005).

The present paper identifies that China is now a world leader in organic agriculture and leads the field, or is highly ranked, on multiple organics parameters. A plot of the longitudinal data reveals the trajectory of China's uptake of organic agriculture over the past several decades.

METHODS AND MATERIALS

Global organics data are collected, collated and published annually, jointly by the Research Institute of Organic Agriculture (FiBL) (Frick, Switzerland) and IFOAM-Organics International (Bonn, Germany) (most recently as: Willer et al., 2026) and such data have been published since 2000 (viz. Willer & Yussefi, 2000). These data have (at least) a 2-year lag (viz. data published in 2026 report 2024 data). The

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present paper draws on the aforesaid historical data set and additional data including from [statista.com](https://www.statista.com) and [greenfood.agri.cn](https://www.greenfood.agri.cn). Where used, 'tonne' = metric ton = 1,000 kg. Currency conversions use [wise.com](https://www.wise.com).

RESULTS

The growth of organic agriculture in the world has shown steady increases year on year; from a total reported in 2000 of 7.5 million hectares (n= 62 countries) to the latest total reported in 2026 as 98.9 million hectares (n=183 countries) (there has generally been a 2-year lag publishing the data, with, for example, 2026 publication attributed to 2024) (Willer et al., 2026; Willer & Yussefi, 2000). Of the 183 countries with reported certified organic hectares, most exhibit steady increases year on year (with occasional deviations) ([organic-world.net](https://www.organic-world.net)).

China's trajectory of organic agriculture growth has been uneven (Fig.1). There was a peak in 2004 at 3,466,570 ha (Paull, 2007) and a trough in 2010 at 1,090,000 ha. From that trough there has been 'more or less' steady upward growth reaching a new peak in 2024 of 3,589,807 ha (Fig.1).

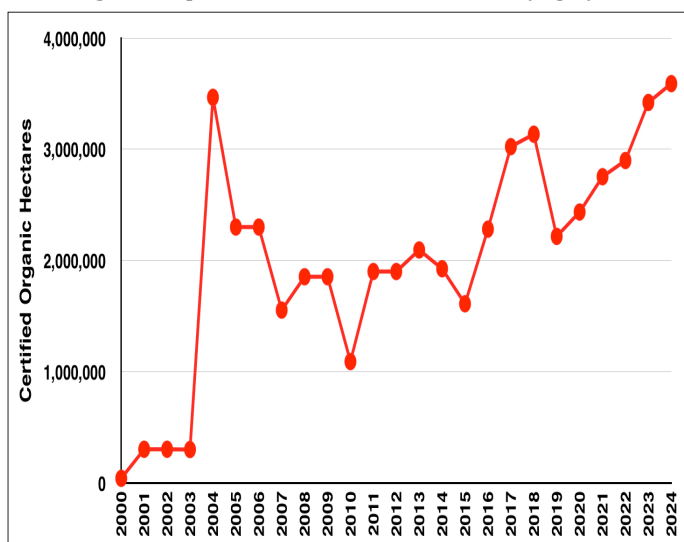


Figure 1. Organic agriculture in China (2000-2024) (data source: [organic-world.net](https://www.organic-world.net)).

China's '14th Five Year Plan' provided: "We will advance high-quality grain projects ...We will promote the green transformation of agriculture, strengthen the environmental protection governance of productive areas ...implement pesticide and fertilizer reduction activities in an in-depth manner ...We will improve the green agricultural standards system and strengthen the certification management of green food, organic agricultural products ...We will strengthen the end-to-end quality and safety regulation of agricultural products and improve the traceability system"(NPC, 2021, pp. 56-57). The five years of the Plan (2021-2025) have now passed and China's organics sector has indeed exhibited steady growth in certified organic hectares (Fig.1).

China is now a world leader in organic agriculture. On the basis of certified organic hectares, China is fourth in the world with 3,589,807 hectares (after Australia with 53,016,058 ha,

India with 3,972,573 ha, and Argentina with 3,936,836 ha) (Willer et al., 2026).

China is the third largest domestic market for organic food with annual retail sales of €15.463 billion (after USA with €60.421 b, and Germany with €16.990 b) (Willer et al., 2026).

China is the world leader in organic arable land at 2,981,454 hectares (followed by USA with 1,598,124 ha, and France with 1,396,743 ha). China is the world leader in organic cereal hectares with 2,009,240 ha (followed by USA with 532,128 ha, and Germany with 397,000 ha) (Willer et al., 2026).

China is the world leader in organic aquaculture with an annual production of 878,000 tonnes, which accounts for 83% of global organic aquaculture (followed by Norway with 54,000 tonnes, and Ireland with 34,000 tonnes) (Willer et al., 2026).

China is the world leader in temperate fruit organic area at 103,739 ha (followed by Germany at 50,290 ha, and France at 28,163 ha). China is the world leader in organic oilseeds hectares at 606,853 ha (followed by Togo at 211,914 ha, and USA at 169,402 ha) (Willer et al., 2026).

China is second in the world for organic 'wild collection' hectares at 3,306,000 hectares (after Finland with 6,928,693 ha, and followed by Zambia with 2,500,000 ha). China has the world's fourth largest organic vegetable hectares at 40,697 ha (after USA at 150,338 ha, Italy with 49,390 ha, and Poland with 40,953 ha) (Willer et al., 2026).

China is the second largest exporter of organic produce to the European Union at 239,023 tonne (after Ecuador with 395,016 tonne, and followed by Ukraine with 203,897 tonne). China's organic exports to USA amount to only 7,533 tonne (Willer et al., 2026). China's total annual organic exports amount to €550 million (Xiao, 2024).

The global total of certified organic hectares is 99,891,258 ha and accounts for 2.1% of global agricultural land with a value of €144.9 billion. China's growth and development of organic agriculture is congruent with China's 14th Five Year Plan. Presently, organic agriculture accounts for only 0.7% of China's total agricultural land so there is a great capacity and opportunity for further growth.

Green Food

Green Food is a novel and well developed alternative agroecology certification protocol that offers producers a 'half-way-house' between organic and chemical farming practices (Paull, 2008, 2025). Green Food is a China-phenomenon which certifies 10.55 million hectares (Statista, 2025). Green Food certification is a potential pathway for producers to transition to organic certification as well as a fall-back option for organic producers. Green Food certifies the sustained reduction of synthetic fertilisers and pesticides, rather than the exclusion required for organic certification.

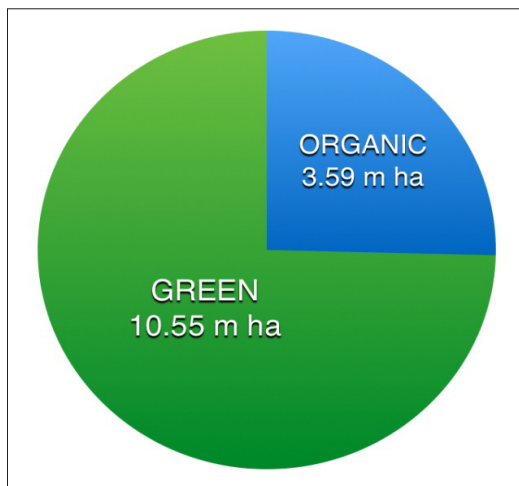


Figure 2. Certified agroecology options for Chinese consumers: Organic and Green Food (data sources: Statista, 2025; Willer et al., 2026)

Globally, 2.1% of agricultural land is certified organic. For China the land devoted to certified organic is 0.7%. Taken together, organic and Green Food account for 2.8% of agriculture land in China (Fig.2).

Provenance-Washing

The international trade in organic produce means that some organic food has a trans-national history, so that produce of Country X may be packaged or processed or used as an ingredient in Country Y. This provides an opportunity for provenance-washing, the practice of retaining the organic provenance while losing the geographic provenance.

The possibility of provenance-washing, can be a temptation to substitute an organic ingredient from a cheaper source for a locally sourced product. This may advantage the import of organic certified produce from China (when and if it is cheaper). The practice of provenance-washing circumvents the intent of Country of Origin Labelling (CoOL) and dis-informs customers under such cryptic rubrics as “imported”and “Non-EU”(e.g Fig.3).



Figure 3. Provenance-washed product: Organic product with ACO (Australian Certified Organic) certification and “Made in Australia from imported ingredients”thereby suppressing the geo-provenance under the rubric of “imported”(image: J Paull, 2026).

Country of Origin Labelling is somewhat haphazard around the world and provides easy options for subversion, obfuscation and disregard. Even where regulations seem clear (e.g Australia), enforcement may be lax (Fig.3). The European Consumer Organisation previously explained: “Consumers have a hard time finding out where their food comes from ...Origin information remains absent from most food sold on the EU market as it is mandatory for only very few products”(BEUC, 2014, p.1). Some CoOL improvement is mooted (Tridge, 2024). However a European Parliament document is dismissive: “in the case of processed food products, country of origin information is of no substantial relevance when assessing quality”(Katsarova, 2024, p.3).

“China is the second-largest source of organic produce imports in the EU ...oil cakes accounted for the largest share at 67.3% [by weight]”amounting to 134,690 tonnes.(CCPB, 2025, p.3). This product is expected to be an organic input for organic animal farming (all or mostly) and will in any event not be expected to be revealed on a product label (and that is not regarded as provenance-washing). The remaining third of organic imports from China include fruit, vegetables, nuts, spices, eggs, honey, coffee, tea, flour, pasta, pastries, biscuits, and bread (CCPB, 2025).

DISCUSSION AND CONCLUSION

China is forging ahead as a global organics powerhouse. The agricultural land certified as organic and the annual retail spend on organics exceed any prior years. The 14th Five Year Plan has sentiments congruent with organic agriculture: health, happiness and environment (NPC, 2021)

The problems of pollution and contamination are well recognised in China, by both the people and the government. Organic agriculture offers some answers to these dual challenges, and it has been embraced by the government of China with the National People’s Congress promise of “fertilizer and pesticide reduction”and to “create ...new high-standard farmland”(NPC, 2021, p.56,58).

Organic agriculture can offer the prospect of economic transformation and development. “For decades, Chehe village was a place of hardship”(Xingxin & Liang, 2025, p.1). After the adoption of organic agriculture: “The village once labelled impoverished, was now thriving, The success of Chehe’s organic model ...becoming a case study in poverty alleviation and rural vitalization”(Xingxin & Liang, 2025, p.2). Chehe is a village in the province of Shanxi, north east China.

Green Food offers a half-way house, for both producers and consumers, between organic and chemical agriculture. For certified Green Food producers there is the opportunity to step-up to organic. Green Food certification maintains a reservoir of farmers skilled in farming with reduced synthetic fertilisers and pesticides, with third-party oversight and certification. For organic producers there is additionally the opportunity to step-down to Green Food certification, while

maintaining third party oversight, certification, some (lesser) price premium, and leaving ajar a door back to organic. This contrasts to organic certification elsewhere which is 'all-or-nothing', viz, organic or chemical and without recognition (or reward) of a 'middle-path'.

The prospects for organic retail sales are positive as Chinese consumers become more affluent and experience increased disposable income (Tan, 2025). The prospects for organic export sales are also positive as Chinese producers and exporters realise the premium value of differentiated products. There have been international knowledge exchanges, for example between Australia and China at Huazhong Agricultural University in Wuhan.(Mascitelli & O'Mahoney, 2014; Paull, 2014b).

The sentiments and plans of the National People's Congress are congruent with the continuing growth of the organics sector: "We will adhere to ecological priority, and ...cooperate to promote environmental protection ...and create a beautiful China model of harmonious coexistence between humans and nature. We will continue to promote the rectification of outstanding problems in the ecological environment"(NPC, 2021, p.73).

While it is often the case, elsewhere, that 'more is said than done', the remarkable transformation of China and its achievement of "the first centennial objective of establishing a well-off society"(CCP, 2021, p.1) (and a great many other realised achievements) leads to great optimism for the continued growth and development of organic agriculture in China. For China: "The tasks are arduous, but the prospects are bright"(CCP, 2021, p.31).

Acknowledgement

Longitudinal global statistics on the organic sector are available due the dedicated work of Helga Willer over more than a quarter of a century. She has produced reports with various colleagues on organic agriculture beginning in 2000 (Willer & Yussefi, 2000) and annually since then (most recently: Willer et al., 2026), thereby bearing witness to the continued growth and development of organics.

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