

## ANALYSING THE BASIS FOR CHINA AND UZBEKISTAN TO COOPERATE IN PROMOTING SUSTAINABLE AGRICULTURAL DEVELOPMENT



<https://doi.org/10.24412/2181-1784-2025-26-619-623>

**Lu Diying ,**

*PhD Candidate, National University of Uzbekistan;*

*Researcher at Institute of Innovation and Development of Silk Road of  
Beijing; Teacher at Inner Mongolia University of Finance and Economics, China.*

*e-mail: ludiyiing1405@163.com*

**Annotation.** *The exploration of circular agriculture and the achievement of sustainable agricultural development have been identified as shared objectives in the agricultural development strategies of China and Uzbekistan. This paper analyses the current status of sustainable agriculture development in the two countries, but also argues that the two sides have a good basis for cooperation in the three areas of policy, resources, and markets, and puts forward recommendations for implementation.*

**Keywords:** *sustainable agriculture, circular farming, organic produce, agricultural cooperation*

### Introduction

Uzbekistan and China, two countries of global importance in the field of agriculture, have been proactive in their response to United Nations initiatives promoting the development of sustainable agriculture. They are committed to the establishment of a model of circular and green agricultural production.

#### **I. The current status of sustainable agricultural development in China and Uzbekistan**

##### **(i) The situation in China**

Recent years have seen China make significant progress in the field of recycled agricultural technologies. These include bioengineering technologies, renewable energy use technologies, new material technologies and agricultural information technologies. In 2023, China applied 50.22 million tonnes of agricultural fertilisers, representing a decrease of 14.0% compared with 2012. The comprehensive utilisation rate of livestock and poultry manure is expected to reach 78.3%, while

the comprehensive utilisation rate of straw is projected to reach 88%. Furthermore, the rate of disposal of agricultural films is predicted to remain stable at over 80%.<sup>1</sup>

(ii) The situation in Uzbekistan

Recent years have seen the Government of Uzbekistan embark on a series of reforms in various sectors, including cotton cultivation, horticulture, greenhouses and the agro-processing industry. These measures are intended to enhance agricultural productivity and economic efficiency. The country is gradually reducing its dependence on cotton and increasing the area planted with food crops, vegetables and fruits in order to improve the diversification and sustainability of agricultural production. Furthermore, the government has been promoting efficient water-saving irrigation technologies in collaboration with international organisations and countries such as the Food and Agriculture Organization (FAO), Japan and China, with a view to adapting to arid or semi-arid climatic conditions. Concurrently, the National Centre for Agricultural Knowledge and Innovation (AKIS) has been established to provide over 100 services to farmers, dehkan farms, clusters and other agro-based companies.

Agriculture is a key sector in Uzbekistan, and transforming and modernising it not only increases labour productivity and farmers' incomes, but also ensures the country's economic stability..

## II. Basis of cooperation between the two countries

At present, the relationship between Uzbekistan and China is at an all-time high. China has accumulated a lot of successful experience in environmental protection and sustainable agricultural development, and the two sides can actively explore and cooperate in this area to promote green development in Uzbekistan.

(i) Policy support

On 19 May 2023, the People's Republic of China and the five Central Asian countries proposed the following in the *Xi'an Declaration of the China-Central Asia Summit*: 'to actively develop smart agriculture and strengthen the application of water-saving, green and other highly efficient technologies and the exchange of advanced experiences'.<sup>2</sup>

China and Uzbekistan signed an “all-weather comprehensive strategic partnership” in January 2024 during President Shavkat Mirziyoyev's visit to China, proposes that the two sides should cooperate in the future in the areas of

<sup>1</sup> 提升农业含绿量 增加发展含金量，人民网，2024 年 12 月 03 日，  
<http://cpc.people.com.cn/n1/2024/1203/c64387-40374048.html>

<sup>2</sup> 中国—中亚峰会西安宣言（全文），2023-05-19，  
[https://www.fmprc.gov.cn/gjhdq\\_676201/gj\\_676203/yz\\_676205/1206\\_676548/xgxw\\_676554/202305/t20230519\\_11080194.shtml](https://www.fmprc.gov.cn/gjhdq_676201/gj_676203/yz_676205/1206_676548/xgxw_676554/202305/t20230519_11080194.shtml)

smart agriculture, water-saving technologies, and the prevention of desertification and soil degradation.<sup>3</sup>

The Shanghai Cooperation Organisation (SCO) and the Belt and Road Initiative (BRI) have also established an excellent platform for agricultural cooperation between the two sides. Furthermore, the establishment of air routes between numerous Chinese cities and the capital, Tashkent, and the inauguration of the China-Kyrgyzstan-Uzbekistan International Freight Route have significantly facilitated the logistics and transportation of agricultural products exported from Uzbekistan to international markets.

(ii) Complementarity of resources

From 2020 to early 2024, the *China-Uzbekistan Arid Zone Oasis Water-saving Irrigation Technology Research and Demonstration Project* has already promoted drip irrigation on an area of 2,000 hectares in Uzbekistan, increasing the water use efficiency of farmland by more than 40 % and increasing crop yields by 20 to 40 %, with China training a total of more than 1,000 water-saving irrigation technicians in Uzbekistan.<sup>4</sup> It is evident that the People's Republic of China has facilitated the training of over one thousand water-saving irrigation technicians within the territory of the Republic of Uzbekistan.

Currently, China's Xinjiang and Inner Mongolia autonomous regions have already established a mature "photovoltaic + agriculture" cycle model. This not only saves irrigation water, solves the problem of water stress in Uzbekistan and improves the yield of agricultural products, but also helps Uzbekistan to implement the *Solar Energy Policy in Uzbekistan: A Roadmap*.

Furthermore, the implementation of China's advanced technologies in comprehensive straw utilisation and livestock and poultry manure treatment has the potential to mitigate agricultural pollution issues in Uzbekistan. Furthermore, the implementation of saline-alkaline land treatment technologies in Xinjiang and Ningxia, such as bio-improvement, plantation integration, and salt-tolerant crop cultivation, could help Uzbekistan improve 1.74 million hectares of saline-alkaline land.<sup>5</sup>

(iii) Market potential

In the context of mounting consumer concerns regarding food safety and health in China, the demand for organic agricultural products has been on the rise.

<sup>3</sup> 中华人民共和国和乌兹别克斯坦共和国关于新时代全天候全面战略伙伴关系的联合声明（全文），2024-01-25, [https://www.gov.cn/yaowen/liebiao/202401/content\\_6928099.htm](https://www.gov.cn/yaowen/liebiao/202401/content_6928099.htm)

<sup>4</sup> 中国技术助力乌兹别克斯坦绿色转型，经济日报，2024-12-06, [http://www.ce.cn/xwzx/gnsz/gdxw/202412/06/t20241206\\_39226127.shtml](http://www.ce.cn/xwzx/gnsz/gdxw/202412/06/t20241206_39226127.shtml)

<sup>5</sup> Uzbekcosmos launches satellite monitoring of soil salinity, 2025-02-28, <https://tashkenttimes.uz/national/14769-uzbekcosmos-launches-satellite-monitoring-of-soil-salinity>

According to the 'The World of Organic Agriculture 2024', China's organic product sales reached 1.124 billion euros in 2022, thus ascending to become the world's third largest organic product consumption market.<sup>6</sup>

The President of Uzbekistan, Shavkat Mirziyoyev, signed the *Organic Products Act* on 25 April 2022. The aim of the new law is to establish requirements for the production, processing, storage, labelling and marketing of organic products in the country.

China represents a significant export market for Uzbekistan's agricultural products, and the agricultural markets of both countries possess considerable potential, offering a vast market space for circular agricultural cooperation.

#### IV. Conclusion

It is evident that there exists considerable potential for collaboration between China and Uzbekistan in the domain of sustainable agriculture, given their respective complementary advantages. It is recommended that the two countries establish a specialised mechanism for cooperation in sustainable agriculture, hold regular meetings, jointly formulate cooperation plans, clearly define the goals and tasks of cooperation, and discuss the signing of an agreement on mutual recognition of organic products between China and Uzbekistan. Using the "China-Central Asia Summit" as a platform, we should initiate the establishment of a transnational scientific research alliance, integrate the resources of universities and other organisations in the two countries, and focus on solving technical problems. The Sino-Ukrainian Modern Agricultural Science and Technology Demonstration Park in Syr Darya Oblast could be used to demonstrate the new Chinese model of circular agriculture and to train more Uzbek agricultural scientists and technicians.

#### REFERENCES

1. 提升农业含绿量 增加发展含金量，人民网，2024 年 12 月 03 日，<http://cpc.people.com.cn/n1/2024/1203/c64387-40374048.html>
2. 中国 — 中亚峰会西安宣言（全文），2023-05-19, [https://www.fmprc.gov.cn/gjhdq\\_676201/gj\\_676203/yz\\_676205/1206\\_676548/xgxw\\_676554/202305/t20230519\\_11080194.shtml](https://www.fmprc.gov.cn/gjhdq_676201/gj_676203/yz_676205/1206_676548/xgxw_676554/202305/t20230519_11080194.shtml)
3. 中华人民共和国和乌兹别克斯坦共和国关于新时代全天候全面战略伙伴关系的联合声明（全文），2024-01-25, [https://www.gov.cn/yaowen/liebiao/202401/content\\_6928099.htm](https://www.gov.cn/yaowen/liebiao/202401/content_6928099.htm)
4. 中国技术助力乌兹别克斯坦绿色转型，经济日报，2024-12-06，[http://www.ce.cn/xwzx/gnsz/gdxw/202412/06/t20241206\\_39226127.shtml](http://www.ce.cn/xwzx/gnsz/gdxw/202412/06/t20241206_39226127.shtml)

<sup>6</sup> The World of Organic Agriculture 2024, <https://www.fao.org/family-farming/detail/en/c/1678159/>

5. Uzbekcosmos launches satellite monitoring of soil salinity, 2025-02-28 , <https://tashkenttimes.uz/national/14769-uzbekcosmos-launches-satellite-monitoring-of-soil-salinity>
6. The World of Organic Agriculture 2024 , <https://www.fao.org/family-farming/detail/en/c/1678159/>
7. Ministry of Agriculture of Uzbekistan,<https://www.agro.uz/ru/>