

SECTOR ASSESSMENT (SUMMARY): AGRICULTURE, NATURAL RESOURCES, AND RURAL DEVELOPMENT¹

A. Sector Performance

1. Uzbekistan's gross domestic product (GDP) grew at an average annual rate of 8.0% between 2010 and 2016, reaching \$63.4 billion in 2016.² The economy proved resilient to the downward pressures exerted from 2008 onwards on other economies by the global financial crisis, despite an economic downturn in the Russian Federation, Uzbekistan's major trading partner and source of remittances. According to the Asian Development Bank (ADB) Asian Development Outlook 2017 Update, the rate of growth in GDP in 2017 is estimated at 6.8%, which is a little lower than originally projected following currency liberalization in September 2017.³ This is, however, expected to lead to higher growth of 7.5% in 2018.⁴ Overall poverty, according to national poverty line estimates, declined from 27.5% of the population in 2001 to 12.8% in 2016 as a result of rapid economic growth.⁵

2. Along with overall economic growth, agricultural GDP in Uzbekistan grew at an average annual rate of 6.7% during 2012–2016. The Asian Development Outlook Update estimates a slower rate of growth of 5.8% for the first half of 2017. Higher rates of growth in other sectors resulted in a decline in the agriculture sector's contribution to GDP, from 34.4% in 2000 to 19.2% in 2017. Agricultural GDP has traditionally derived from the production of cotton and wheat, which the government regarded as strategic crops and supported through preferential access to land, inputs, and finance. However, there has been a shift in the contribution of these crops to GDP since 2000. The share of cotton production in GDP declined from 3.6% in 2000 to 2.3% in 2017. Over the same period, the contribution of grains to GDP fell from 3.4% to 2.4% while the combined share of fruit and vegetables increased from 5.2% to 10.6%.

3. Despite its declining share of GDP, agriculture remains an important sector. In 2017, it accounted for 27% of the total employment. It is also a key income source in rural areas, where 49% of the population resides and which accounts for 75% of people living below the poverty line. About 4.7 million rural households operating as *dehkan* (small-scale) farmers derive their income from agriculture. *Dehkan* farms, which operate independently of government support, account for the production of 66% of vegetables, 76% of potatoes, 54% of fruit, and 49% of grapes on farms of 0.35–0.50 hectares (ha).

4. **Constraints.** Although continued growth in the sector is expected, agriculture is characterized by low productivity and remains labor intensive. Horticulture production has traditionally been constrained by limited access to good quality land, specialized horticulture machinery, appropriate inputs, and, in particular, finance. The horticulture value chain is characterized by rudimentary marketing and transportation infrastructure, weak linkages between

¹ This summary is based on the detailed sector assessment accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President.

² World Bank estimate in United States dollars. <http://www.worldbank.org/en/country/uzbekistan> (accessed 1 January 2018).

³ In September 2017, the government initiated a comprehensive exchange rate reform to address long-standing difficulties associated with limited access to foreign exchange and requirements to surrender foreign exchange, which gave rise to parallel exchange markets and economic distortions. As a result, the sum was devalued by 92.4% against the United States dollar.

⁴ ADB. 2017. *Asian Development Outlook 2017 Update: Sustaining Development Through Public–Private Partnership*. Manila.

⁵ On the basis of \$1.90 purchasing power parity criterion, an estimated 68.1% of the population was below the poverty line in 2012. ADB. 2017. *Basic 2017 Statistics*. Manila.

value chain actors, and limited and technologically poor storage and processing capacity. There is no coordination of wholesale market activity at the national level. All fruit and vegetable markets are managed at the local level, which has given rise to a range of wholesale and retail market outlets of varying capacities and levels of professionalism. These weaknesses are reflected in high levels of post-harvest losses. At the national level, losses are estimated to be up to 30%, while in the two project regions losses are estimated at 21% in Andijan and 29% in Samarkand.⁶ Together, the identified problems also constrain value addition in fruit and vegetable products and the realization of significant export potential.

5. **Opportunities.** Significantly larger volumes of produce with improved quality could be marketed with better post-harvest logistics, notably product consolidation, cold storage, and transport. Only 15% of all horticultural production is processed. About 69.0% of fruit is consumed fresh, 20.0% processed, and 11.0% exported, while 81.0% of vegetables are consumed fresh, 11.3% processed, 4.3% used for seeds, and 3.4% exported. This indicates a significant opportunity for improved value addition from increased processing and exports of both fresh and processed products. An analysis of Uzbekistan's revealed comparative advantage suggests that the country is more specialized in producing horticultural products than many of the world's producers, indicating potential to expand its export market. The traditional market for Uzbek horticultural produce has been the Russian Federation, which accounts for 80% of all exports from Uzbekistan, though Uzbek imports only account for 3%–4% of the Russian Federation's fruit and vegetable imports. Uzbek exports could expand significantly by capturing a larger share of the Russian Federation market. Beyond this market, there is also scope for Uzbek horticulture exports to European markets, where fruit and vegetable consumption is relatively low based on nutritional requirements recommended by the World Health Organization. However, accessing European markets, especially in the European Union, will require improvement in horticulture quality and safety standards and certification systems. In this context, there is considerable scope to improve storage, processing, and marketing infrastructure and technologies.

6. Continued diversification from cotton and wheat production towards horticulture also offers significant environmental benefits regarding water usage. Climate change projections for Uzbekistan for 2005–2050 indicate that (i) water supply will decrease from 57 billion cubic meters (m^3) to 52–54 billion m^3 , (ii) water demand will increase from 59 billion m^3 to 62–63 billion m^3 , and (iii) the water deficit will increase by more than 500% from about 2 billion m^3 to 11–13 billion m^3 .⁷ Horticultural crops typically use less water than cotton and are more efficient in water use than grain crops. In Uzbekistan, 4,426 m^3 of water is required to grow 1 ton of cotton, and 2,068 m^3 of water is required for 1 ton of wheat.⁸ By comparison, grapes require about 2,400 m^3 and apples about 820 m^3 per ton to produce.

B. Government's Sector Strategy

7. The government's welfare improvement strategy aimed to reduce poverty through improved rural productivity and the creation of income-earning activities. With respect to agriculture, the strategy included (i) further structural reforms and diversification of agricultural production; (ii) mechanization of agriculture, improvement of infrastructure, and development of agribusiness; (iii) more productive use of land and water; (iv) greater financial stability of farm

⁶ Andijan and Samarkand are the selected locations for establishment of agro-logistic centers under the proposed Horticulture Value Chain Infrastructure Project. For estimates of crop losses, refer to Andijan and Samarkand Agro-logistic Center Feasibility Studies (available on request).

⁷ World Bank. 2010. *Climate Change and Agriculture Country Note*. Washington, DC.

⁸ M. M. Aldaya, A. Y. Hoekstra, and G. Munoz. 2010. Water footprint of cotton, wheat and rice production in Central Asia. *Value of Water Research Report Series*. No 41. Delft, Netherlands.

entities; and (v) more market-oriented agricultural policies. The government's agricultural development plan to 2020 includes further reductions in cotton and wheat production and an increase in horticulture production. This will result in increases in areas of production for potatoes by 36,000 ha, vegetables by 91,000 ha, fruit orchards by 18,000 ha, and vineyards by 11,200 ha.⁹ In addition, government policy in respect of horticulture is to facilitate market-driven development that is led by the private sector and supported by improved access to finance and improved technologies, especially to facilitate greater value addition and realization of export potential. Specific focus was afforded to agro-processing as part of the broad economic policy and strategy defined in a presidential decree of February 2017.¹⁰ As part of a general strategy for modernization and intensive development of agriculture, the decree targeted the implementation of investment projects for construction of new processing plants and reconstruction and modernization of existing plants, with such plants to be equipped with modern high-technology equipment for greater processing of agricultural products, production of semifinished and finished food products, and production of packaging materials. The most recent government strategy announcement provides further support for the horticulture sector and identifies a number of constraints that need to be addressed to enable horticulture producers, processors, and traders to improve product quality and access to domestic and international markets.¹¹ The resolution proposes the establishment of horticulture clusters where production and post-harvest services can be consolidated to improve efficiency and realize economies of scale. The reorganization of marketing systems and the introduction of logistic centers is given specific focus.

C. ADB Sector Experience and Assistance Program

8. Since 1996, ADB has supported agriculture and enterprise development in Uzbekistan. For agriculture, ADB has supported irrigation rehabilitation and land improvement that have enhanced water supply for cotton and wheat production to improve soil management and support farm enterprises. The ongoing Horticulture Value Chain Development Project and its associated additional financing project¹² support the government agriculture sector objectives while enhancing agricultural productivity and supporting the sustainable financial and economic viability of horticulture producers and agribusiness enterprises.

9. The country partnership strategy (CPS)¹³ supports Uzbekistan's transformation into a modern industrial and service economy through sustained and inclusive growth, reduced poverty, and expanded regional cooperation. Strategic assistance to be provided under the CPS will catalyze industrial development, accelerate economic diversification, promote private sector development, ensure climate-resilient investment, and create new employment opportunities.

⁹ Approved by the Cabinet of Ministers on 29 December 2015.

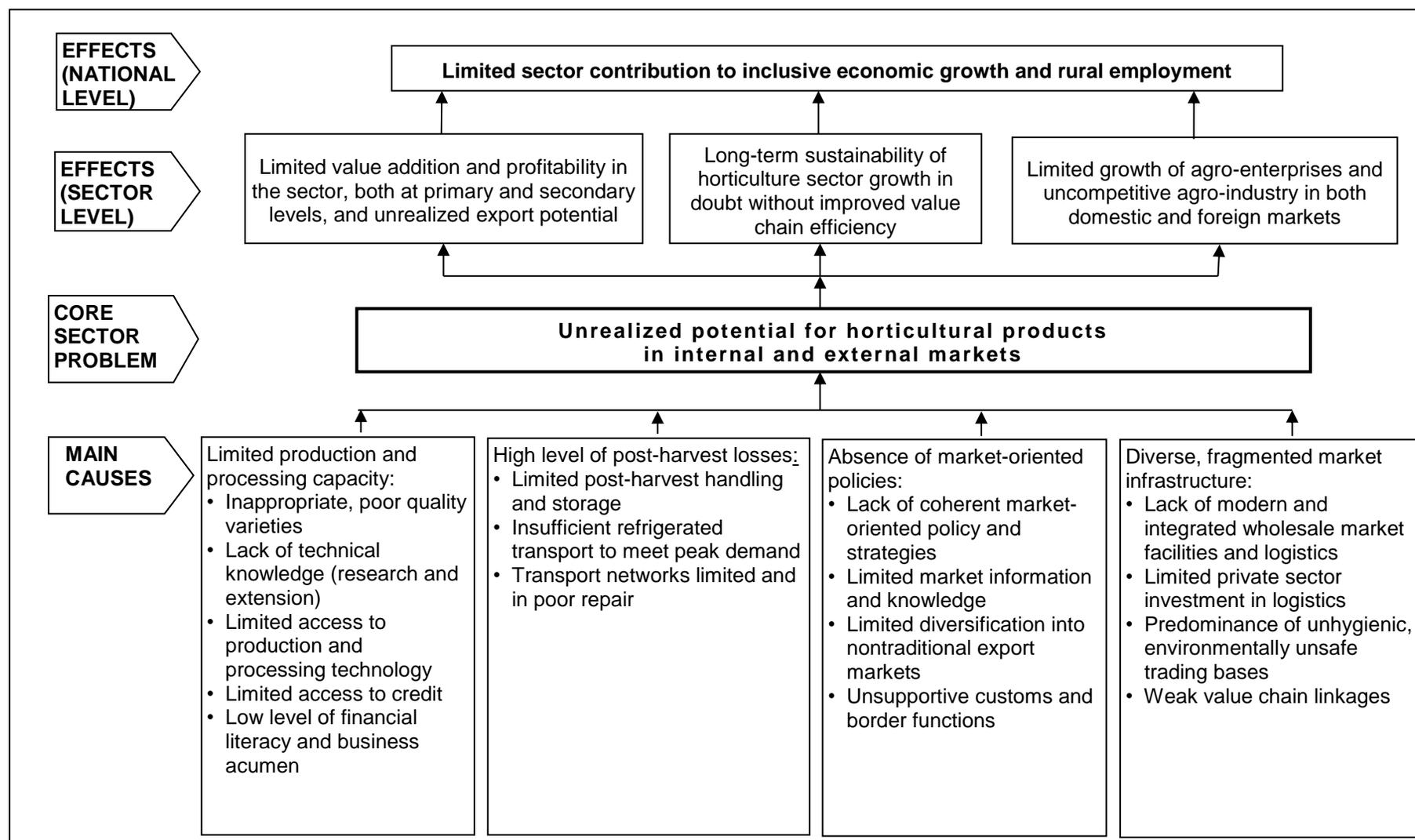
¹⁰ Government of Uzbekistan. 2017. *Presidential Decree No. UP-4947*. Tashkent. Under this decree, the government set out a program of strategy of actions on further development of Uzbekistan.

¹¹ Government of Uzbekistan. 2018. *President Resolution No. UP-5388*. Tashkent. Under this resolution, the government adopted additional measures to expedite development of horticulture in Uzbekistan.

¹² ADB. 2016. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of Uzbekistan for Horticulture Value Chain Development Project*. Manila; ADB. 2018. *Additional Financing: Horticulture Value Chain Development Project in the Republic of Uzbekistan*. Manila.

¹³ ADB. 2012. *Country Partnership Strategy: Uzbekistan, 2012–2016*. Manila.

Problem Tree for Agriculture, Natural Resources, and Rural Development



Source: Asian Development Bank.