

# Recent changes in Uzbekistan's cotton procurement: Implications and reform agenda ahead

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## Abstract

Cotton in Uzbekistan is widely considered as one of the most regulated agricultural sectors in any of the post-Soviet countries. However, after the government liberalized foreign currency exchange and announced drastic increases in farm-gate cotton prices in recent months, substantial reform seems to be in the making. Based on a statement of the tax and subsidy flows in the existing cotton procurement system, this policy brief provides a tentative analysis of recent policy change and makes suggestions for the reform agenda ahead. So far, taxes of up to 40% of gross cotton revenues dwarf farmers' incentives to increase productivity, diversify their crop portfolio and invent and adopt innovations. By redistributing cotton revenue from the government budget to farmers, higher procurement prices will strengthen these incentives. To mitigate the budgetary implications of reform, the government might increase direct land taxes and water charges and cut subsidized production loans. However, to reach the officially declared goals of farm mechanization and a deepening of domestic cotton processing, more thorough steps in liberalizing output and factor markets will be required. Kazakhstan's reforms after independence exemplify how private contracting between farmers, ginners and exporters could boost cotton area expansion, yield growth and the adoption of mechanical harvesters.

## Introduction

The cotton sector in Uzbekistan remains among the least reformed sectors in the post-Soviet space. Only recently did the government of Uzbekistan take new measures to reform the cotton sector. In September 2017, the currency exchange market was liberalized. This was accompanied by a program for expanding domestic textile production and boosting the export of ready textile products by 2020. The plan includes the introduction of vertically integrated cotton clusters and diversification of foreign markets for textile exports. The government announced a gradual mechanization of cotton picking and harvesting 80% of cotton by machines in 2020. To expand production of high value crops, the government continues to reduce cotton area, particularly of low cotton productivity. In March 2018, the government announced an increase in the procurement price by about 70%, namely up to 393 US\$/t. At the same time input subsidies to cotton producers were cut.

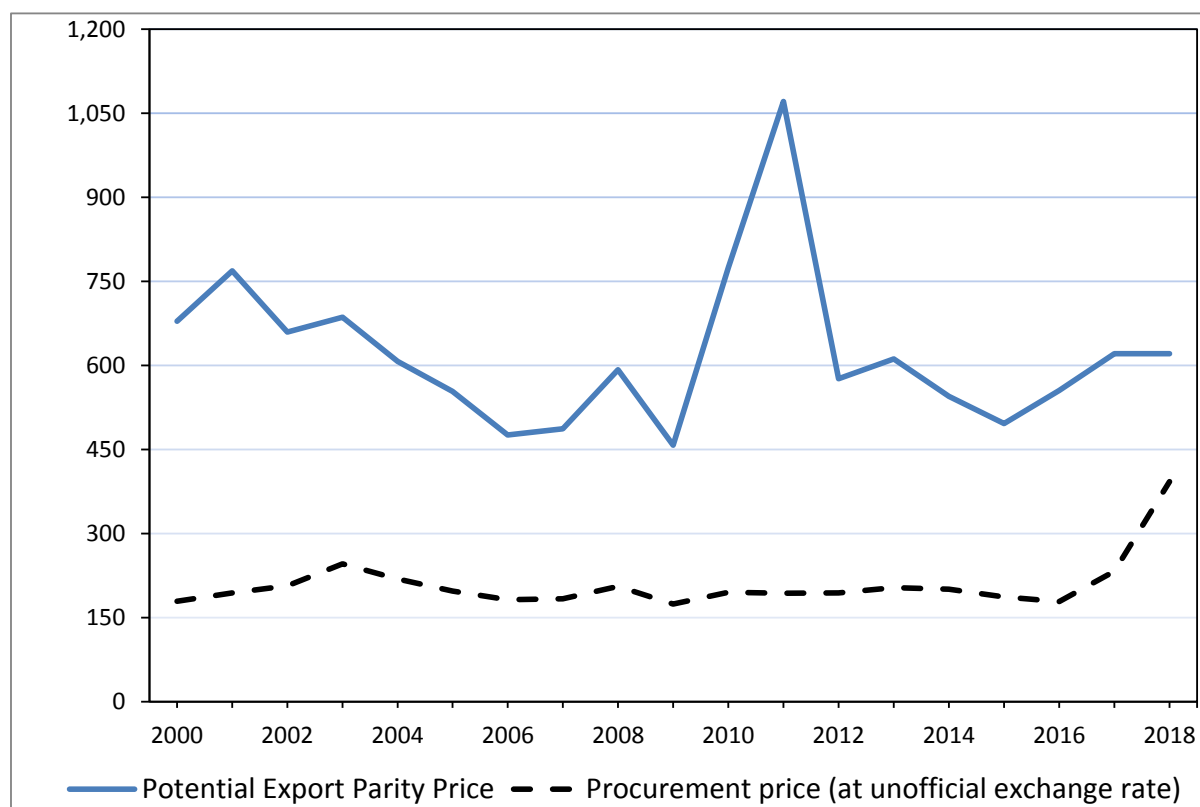
Will this reform wave usher in a new era for cotton production in Uzbekistan? Based on official statistical data on agricultural subsidies and taxes, this policy brief analyzes the possible consequences of recent reform steps and suggests an agenda for further cotton reform. The officially declared goal of these policy changes is to increase productivity and efficiency of the cotton

sector via liberalization of cotton prices and eliminating producer distortions associated with production targets and input subsidies.

### Current design of cotton policy in Uzbekistan

Traditionally, the government of Uzbekistan set the procurement prices well below the potential border prices (Figure 1). Using the unofficial (black market) exchange rate, the procurement price floated around one third of the potential border price between 2000 and 2016. In 2017, the government narrowed the price gap, while the recently announced procurement price for 2018 is just 37% lower than the potential border price, an absolute record for the observed period.

Figure 1: Procurement and potential border prices of cotton, constant 2016 US\$/t



Note: The procurement price of cotton for 2017 and 2018 for Uzbekistan were taken as the price for cotton of fifth type, second grade, first class. The Export Parity Price (EPP) was calculated based on Guadagni et al. (2005). We assume that EPP for 2018 is equal to 2017.

The cotton policy was argued to cause major economy-wide distortions and efficiency losses, whether in inputs and outputs markets or the ginning and textile sectors, as well as underutilized exports capacity in textiles and high value crops (Guadagni et al. 2005, Sadler 2006).

**Allocative inefficiency:** The cotton policy at producer level implies that land allocation decisions are determined administratively and are not driven by market signals. Cotton occupies about 40% of sown area of individual farms. This limits the options for crop diversification, as well as farmers' response in adjusting their cropping structure to weather and water variability (Petrick and Djanibekov 2016). Farmers usually divert a fraction of subsidized inputs received for cotton to

cultivate high value crops. The low procurement prices called into question the profitability of harvest mechanization, as state-mandated labor mobilization during cotton harvest artificially depressed agricultural wages.

**Distributional effects:** The substantial spread between border and producer prices deprives farmers of cotton revenue to the benefit of the government budget. The state-led prioritization of land, water and input allocation to cotton puts producers of other crops and the livestock sector at a disadvantage. The governmental preference for cotton lint exports, instead of textiles, delayed the development of domestic value addition in the cotton sector.

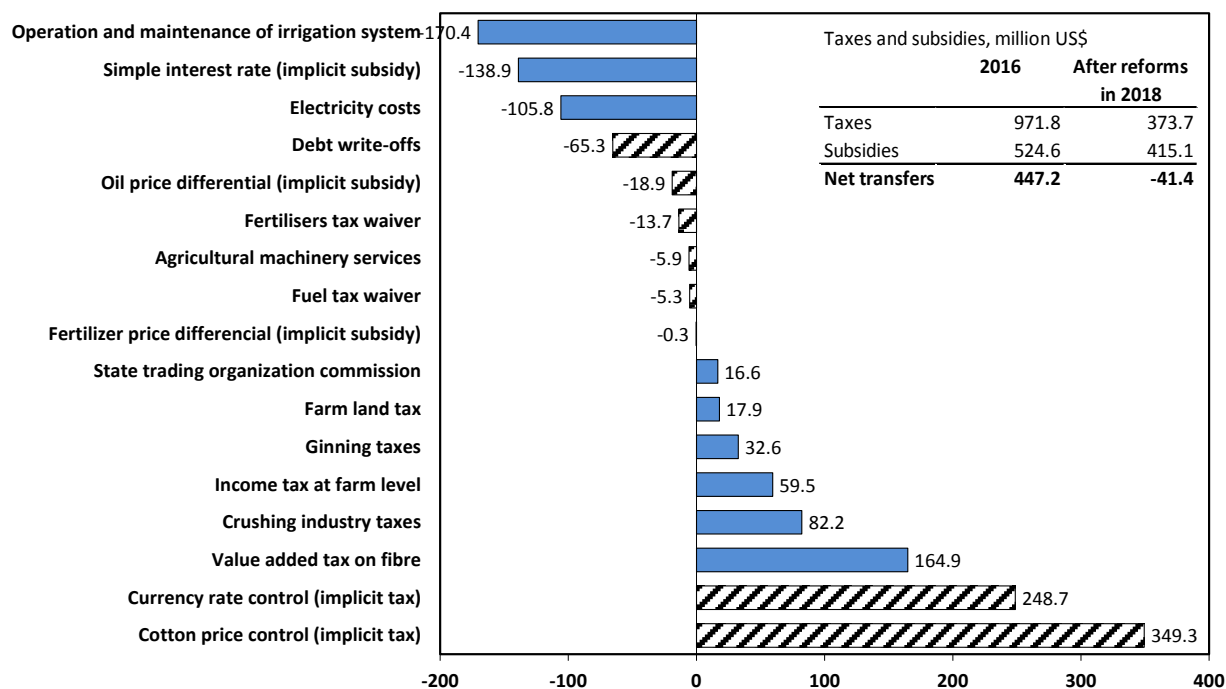
**Static and dynamic technical inefficiencies:** Government allocation procedures induce under-application of inputs to cotton fields, and the output often does not exceed the production target. Low net return and economic losses in cotton production hinders farmers' investments in modern technologies. The irrigation subsidies associated with the cotton policy deteriorate farmers' interest to invest in techniques with higher irrigation efficiency, leading to waterlogging and soil salinization.

### Reform effects on tax and subsidy flows

At the sectoral level, the governmental regulates the cotton sector through a complex package of subsidies and taxes. In 2016, 36% of cotton sector taxes were implicit in the procurement price controls and 26% in the control of the currency exchange rate (**Figure 2**). About 53% of the cotton subsidies were directed to operation and maintenance (O&M) of the irrigation system, including coverage of electricity costs, and 27% to subsidized production loans. The resulting net transfers from the cotton sector made up only 1% of GDP. However, at the producer level, the cotton policy has often resulted in economic losses. In 2016, implicit and explicit taxes accounted for 40% of producer revenues, and production costs could be recovered only at yields above 2.3 t/ha.

The announced cotton prices for 2018 may increase cotton profits to unprecedented 400 US\$/ha, given the current cultivation techniques and wages. The announced changes in the structure of cotton sector taxes and subsidies are indicated in dashed bars in Figure 2. Eliminating the exchange rate control in 2017 and equalizing the procurement prices with the potential border price implies a significant reduction in budgetary inflows. This will be partly compensated by the announced cuts in input subsidies. As presented in the upper-right table in Figure 2, such changes will create a budgetary imbalance if irrigation subsidies and production credit subsidies are continued.

Figure 2: Structure of cotton taxes and subsidies in 2016, million US\$



Source: Djanibekov and Petrick (2018).

### Need for further reforms

With higher procurement prices, cotton will become economically competitive with high value crops. The announced procurement price will improve producers' incentives to increase yields and invest in production technologies. The new profit margin may allow farmers to offer higher wages, especially to cotton pickers, and turn away from labor mobilization. For labor scarce areas the new price will provide farmers with sufficient reserves to employ cotton combine services.

While there is no doubt about the announced increase in procurement prices, various studies point out that the cotton sector should be reformed more deeply, beyond the higher administrated procurement prices. Since the cotton system has been a state monopoly for a long time, the rapid implementation of such a reform will imply high transitional costs. A stepwise approach to cotton sector reform in Uzbekistan will allow stakeholders to correct their expectations and take adaptive actions to reduce adjustment costs, especially in regions specialized in cotton production. A strong political will is required to abolish the central planning approach in the cotton sector. Our analysis suggests a number of policy recommendations:

- The government should consider **liberalizing cotton prices**, not just administratively increasing the procurement prices. In this regard, farmers and ginneries should be able to agree over prices without governmental intervention in price-setting. The market pricing mechanism will be vital for attracting private investments in ginning, improving farm incomes and ensuring productivity growth.
- Any nascent domestic textile industry will depend on cotton productivity at the farm level. In addition to price liberalization, the centrally-set production targets should be abolished to

increase producers' decision-making freedom. Already a partial modification of the production target system by **abolishing the minimum area under cotton cultivation** will have an efficiency enhancing effect. Assigning the production target to harvested quantity, but not to sown area, will allow farmers to achieve economically more efficient cropping structure (Djanibekov et al. 2015).

- The price liberalization should be accompanied by market liberalization, namely allowing the **entry of private investors** in the ginning sector and their competition. The farmers' freedom to decide about marketing channels based on the conditions offered will facilitate competition among ginneries and ensure higher producer prices.
- To **compensate the reduced budgetary inflows** after cotton sector liberalization, the government should increase the value of land tax (Guadagni et al. 2005). At the same time, it should phase out credit subsidies to cotton producers.
- While a liberalized cotton sector will still require government coordination, it should be clearly limited to **public good type of activities**. For example, public research programs can address the development of drought-tolerant cotton varieties and matching cotton production techniques to mechanized cotton harvesting.
- The **reduction of subsidies** related to electricity and O&M in irrigation should be gradual. An immediate termination of these subsidies will have dramatic social and economic implications. The liberalized cotton sector will improve farmers' interests in a well-functioning irrigation system. This, in turn, will permit the government to introduce higher water charges and, thus, economize on the irrigation subsidies. An emerging textile industry will generate additional fiscal revenues to fund the irrigation system and thus reduce farmers' tax burden.

Kazakhstan's cotton reforms provide a vivid example of sectoral liberalization and its outcomes. Despite a long history of state regulation, de-collectivization in the 1990s led to rapid private investments in ginning and considerable expansion of cotton area and production. Private contracting and financing boosted yields and allowed harvest mechanization and the emergence of a profitable cotton export chain. However, regulation in favor of a state-mandated "cotton cluster" and the restriction of private financing turned the sector to decline after 2007 (Petrick et al. 2017).

## References

- Djanibekov, N., Petrick, M. (2018) Cotton Taxation in Uzbekistan: Revisited. Report for the World Bank.
- Djanibekov, N., Djanibekov, U., Sommer, R. and M. Petrick (2015) Cooperative agricultural production to exploit individual heterogeneity under a delivery target: The case of cotton in Uzbekistan. *Agricultural Systems*, 141, 1-13.
- Guadagni M., Raiser, M., Crole-Rees, A., Khidirov, D. (2005) Cotton taxation in Uzbekistan: Opportunities for reform. ECSSD Working Paper No 41. Europe and Central Asia Region, World Bank, Washington DC.
- Petrick, M., Djanibekov, N. (2016) Obstacles to crop diversification and cotton harvest mechanisation: Farm survey evidence from two contrasting districts in Uzbekistan. IAMO Discussion Paper No. 153, Halle (Saale). <http://purl.umn.edu/234226>
- Petrick, M., Oshakbayev, D., Taitukova, R., Djanibekov, N. (2017) The return of the regulator: Kazakhstan's cotton sector reforms since independence. *Central Asian Survey* 36 (4), 430-452.

Sadler, M. (2006) Vertical coordination in the cotton supply chains in Central Asia. In: J.F.M. Swinnen (Ed.), *The Dynamics of Vertical Coordination in Agrifood Chains in Eastern Europe and Central Asia: Case Studies*. Working Paper 42, Washington, DC, World Bank, pp. 73-114.