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The multiple paradoxes of the agriculture issue in Central Asia

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Introduction

Agriculture constitutes one of the main sectors in the economies of Central Asia: cotton production and export, mainly in Uzbekistan and Turkmenistan, and to a lesser extent in Kazakhstan and Tajikistan; a booming grain sector in Kazakhstan; and a long tradition of vegetable cultivation throughout the region. The agrarian question is a sensitive one since the population is still predominantly rural in four of the five republics (all except Kazakhstan) and because food safety is not ensured in the two poorest states (Kyrgyzstan and Tajikistan). Land reform would be a priority for the growth of investment, increased productivity, and, consequently, the reduction of rural unemployment and poverty. However, pressed by the choice of cotton versus self-sufficiency in food production, the Central Asian states remain hesitant. They must also manage many structural problems, including high levels of corruption in the agrarian administrative organs, the opacity of decision-making structures for the export of production, quasi-slavery in some impoverished rural areas, child labour, and serious environmental problems related to the overuse of the soil.

The European Union is a minor agricultural customer for the states of Central Asia. A majority of Central Asian exports stay in the post-Soviet market: Kazakh grain is sold mainly to neighbouring countries and some Middle Eastern states, and Uzbek cotton production goes mainly to Russia. Even though trade has increased with Kazakhstan, it still only ranks 73rd among exporters of agricultural products to the EU. Central Asian cotton faces competition from several countries—such as the United States, India, and Pakistan—that produce more than they consume.¹ Finally, as in other economic sectors, conditions in Central Asia discourage the implementation of many European companies. Some of them nonetheless continue to buy cotton fiber from Central Asia, including Paul Reinhart AG (Switzerland), Cargill Cotton (UK) and Geocoton (France).

Table 1. EU-Central Asia agricultural exchanges in 2007

	Agricultural exports to the EU (€ millions)	Agricultural imports from the EU (€ millions)	Total exports and Imports (€ millions)
Kazakhstan	157	190	347
Kyrgyzstan	10	6	16
Uzbekistan	59	51	110
Tajikistan	30	17	47
Turkmenistan	7	9	16

Source: Table compiled on the basis of official figures available for each country at <<http://ec.europa.eu/trade/issues/bilateral/data.htm>>.

Although Central Asia is a modest partner in terms of agricultural trade and relatively few European companies are based in the sector, the agrarian issue is of importance for the EU. In the face of massive corruption, what cooperative development should be proposed in agriculture? When it is harvested under unacceptable conditions, what position should be taken towards cotton production? Should there be no collaboration

over agriculture, while this sector is essential for the survival of many of these republics? How should land reform be supported such that the rural population receives the benefits? After a brief assessment on the current agrarian situation and the land reforms that have taken place in the 1990-2000 period, this paper will consider the cotton versus food security issue, and then the political and economic issues the Central Asian land sector has to face, in order to propose recommendations to the EU.

1. The Central Asian Agricultural Sector: Figures, Reforms, and Paradoxes

The Agrarian Question by State

The five Central Asian states form a vast agricultural area of 306 million hectares.² By virtue of its size, Kazakhstan is a special case. According to official figures from the Ministry of Agriculture, the country now has 222 million hectares of farmland, a majority of which (189 million or 85%) is being used as pasture and 24 million (10%) as cultivated land. Nearly two-thirds of the latter is devoted to cereals and one-third to fodder crops.³ Due to booms in oil and gas, Kazakhstan has seen agriculture fall rapidly into the background in terms of its share of revenues. Thus, while the primary sector made up almost 13% of the national GDP in 1995, in little more than a decade, it represented just 6.7% in 2006, and 5.8% in 2008. The sector remains small compared to the importance of industry (39% of GDP) and the tertiary sector (54%).⁴ In terms of exports, the trend is similar. In 1988, agriculture accounted for 17% of the exports of the republic, but only 6% in 2000, while for the same period, oil jumped from 10 to 50% and metal from 19 to 32%.⁵

However, Kazakhstan remains a major exporter of grains—

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and to a lesser extent, of fruits and vegetables, intended in particular for Russia and other CIS markets—but a secondary exporter of cotton. Kazakhstan seeks to become one of the major breadbaskets of the world and to increase its export capacity. In 2004, grain production was only 9 million tonnes, but it reached 19 million in 2007,⁶ up 22% over 2006. Figures for 2008 have decreased slightly, to 17 million tonnes. While in 2006, Kazakhstan was the fourteenth largest exporter of grain in the world, it now ranks sixth and hopes to become the fifth by the end of the decade. In 2008 the country exported nearly 6 million tonnes of wheat. However, its main customers—Uzbekistan, Tajikistan, Afghanistan and Iran—are rather poor and often insolvent countries. Hence, the importance for Astana to put in place European standards for grain products certification in order to target more efficient markets where payment is guaranteed.

Uzbekistan and Turkmenistan form a second category. In both countries, agriculture consists mainly of cotton and much of the population still works in this sector. Despite the many challenges it faces, Uzbekistan is undoubtedly the main agricultural power in Central Asia, even with just 43,000 km² of irrigated land.⁷ The country produces mainly cotton, but also fruits, vegetables, cereals, and rice in the west, in Karakalpakstan and Khorezm, as well as livestock. These products are intended primarily for domestic consumption, although some are also exported to neighboring countries. According to EU figures, the share of agriculture in the GDP of Uzbekistan fell from 32% in 1995, to 24% in 2007,⁸ but the sector still employs 44% of 15 million people active in the national workforce.

In Turkmenistan, agriculture is also a leading sector in terms of economic activity. It employs nearly half the population, but its share in GDP is even more modest than in Uzbekistan, at only 10% against 38% for industry and 50% for the tertiary sector.⁹ Only 5% of the surface area of the country is arable, about 1.6 million hectares, of which 28,000 km² is irrigated. The remaining 95%, mostly desert, is used for grazing livestock or is undeveloped. The country produces mainly cotton, grain, and livestock. Since independence, the authorities have set goals of grain self-sufficiency, but the results have hardly been conclusive. Between 1991 and 1996, the amount of land cultivated increased by 420,000 hectares, mobilising the few available machines to the detriment of the development of the irrigation system. The area covered by wheat multiplied by four, from 200,000 hectares in 1990, to 800,000 in 2001-2002.¹⁰ This growth was achieved in part at the expense of fodder crops for animal feed (not without consequences for livestock), cotton and vegetables.

Kyrgyzstan and Tajikistan have a much smaller agricultural potential due to the high altitude of the majority of their territory. However, this sector is one of the few where they have export potential, as well as a vital area for food security.

In Tajikistan, only 21% of the territory is considered arable and there is only 7,220 km² of irrigated land.¹¹ Agriculture notwithstanding accounts for 30% of the country's GDP and employs more than two-thirds (67%) of its workforce.¹² The agricultural sector has been particularly hard hit by the collapse of the Soviet Union and the civil war in the first half of the 1990s. But during the first half of the 2000s, it largely returned to the levels in **saw** verifier during the last Soviet years.¹³ Tajikistan produces mostly wheat (36%), cotton (30%), and other cereals (9%).¹⁴ Cotton is grown on about 40% of the arable land; more than half the output comes from the southern region of Khatlon and one-third from the northern province of Sogd.¹⁵ With rapid population growth, lack of urban or industrial work opportunities, and increasing food insecurity, the pressure on the land has increased since independence. At the same time, paradoxically, the mass migration of people of working age people has emptied the country and hindered agricultural development: working in the fields is now often left to women, children and the elderly.

In Kyrgyzstan, the situation is similar. Agriculture constitutes 32% of the GDP, while industry accounts for 18% and services for 49%.¹⁶ Of about 2.7 million people active in the workforce, nearly half (48%) worked in the agricultural sector, against only 12% in industry and close to 40% in the tertiary sector.¹⁷ Given the very high overall levels of unemployment and poverty in the country, the agricultural sector is a vital source of income for the population. Kyrgyzstan has become the largest agricultural producer in terms of percentage of GDP, but it has the smallest amount of arable land.¹⁸ The area of irrigated land is limited to 10,700 km². In agricultural terms, regional disparities are extremely high. The north has 887,000 hectares of arable land, used mainly for growing wheat, but the south has less than half that area, only 415,000 hectares, for more than half of the population. The ratio of land per person is 0.19 hectares in the south, compared to 0.53 hectare in the north.¹⁹

The agricultural capacity of Central Asian states remains modest. Uzbekistan, the most agricultural country of the region, has no more than 10% arable land on its territory, while Kazakhstan has 8%, Kyrgyzstan and Tajikistan about 6.5%, and Turkmenistan less than 5%.²⁰ These lands were made fertile primarily through irrigation systems built by humans, although sometimes from surface waters as rivers. Across the region, with the exception of Kazakhstan, the pressure on land is much stronger since birth rates remain high in the countryside, where more than half the population of the four southern republics lives.²¹ In Turkmenistan like Uzbekistan, a process of ruralisation set in during the 1990s (already visible since the 1970s) as a consequence of the difficulties of urban life without work opportunities. Many people preferred to return and resettled in their home villages to work individual plots. The rural populations therefore suffer from very high unemployment rates given the scarcity of land. Marked in its entirety by low population density,²² Central Asia is experiencing severe overcrowding in agrarian areas. In

Turkmenistan, there is at best just 0.5 hectare of arable land per person, compared to an average of 2.3 hectares for the rest of the former Soviet Union.²³ The most difficult situation is in the Fergana Valley, where more than 10 million inhabitants, or nearly 20% of all the entire population in Central Asia, live. Near Andijan, population density reaches 559 persons per km².²⁴

The Mixed Results of Land Reforms

While some governments have been more proactive than others in terms of land reform, it is far from being final and still faces many obstacles, even in the two states with more liberalised economies, Kazakhstan and Kyrgyzstan. Privatisation of land comes with serious misgivings among Central Asian elites, all trained according to the Soviet model and attached to the principle of land as state property, and also concerned with social stability. Governments have indeed sought to ensure that privatisation does not lead to ethnic conflicts, as was the case in 1990 in Osh, where access to land in part triggered confrontation between Kyrgyz and Uzbeks. In Uzbekistan in particular, fear that privatisation will lead to massive unemployment paralyzes any reform; no non-agricultural compensatory economy seems to be developed in rural areas. Moreover, land is a substantial financial resource and an object of desire. The best lands have generally been awarded to the former party elite or former directors of collective farms. Finally, the farmers themselves often express reluctance towards privatisation. Rural areas have suffered the brunt of the declining state involvement in social benefits to collective and state farms (food, social and health services, transportation infrastructure, and collective management of expensive equipment and inputs), and are sometimes reluctant to let go of the last collective structures, which are symbols of some minimal assistance.

Kyrgyzstan is the only country in the region that has resolutely embarked on the conversion of large Soviet farms, guaranteeing the right to private property and creating the legal conditions for an open land market. In Kazakhstan, reforms were initiated quite early but were more limited than in Kyrgyzstan. Despite 99-year leases granted to private operators, the ownership of land remains the responsibility of the state. The main problem of Kazakh agriculture remains the lack of investment necessary for performance growth and quality improvement. The conditions of storage, processing and packaging often render local food uncompetitive with imports; a large part of the fruits and vegetable production is damaged or over-priced even before it reaches store shelves. The farms are still very large, a legacy of the Soviet system, and largely managed as collectives. Few farms are cultivated on an individual basis: In 2005, these latter cultivate less than 147,000 hectares on 222 million hectares,²⁵ located mainly in the south and used to grow cotton. The continental climate of the country forces to extensive farming with low yields. Thus, the record in 2007, 1.3 tonnes of grain per hectare, is less than half that of Canada (2.7 tonnes of grain per hectare).²⁶ But due to its dry climate, the

country can combine several varieties of wheat and durum.

In Uzbekistan, the agricultural sector remains largely in state hands, despite the many reform plans. Even today, nobody owns the land they operate. In 1993, collective farms were replaced by cooperatives (*shirkat*) that only slightly changed the operating modes of the Soviet regime. The *shirkat* represent 60% of production but are largely deficient. According to International Crisis Group (ICG), in 2003, 45% of *shirkat* made no profit because of their low yields: less than one tonne of cotton per year per hectare in Karakalpakstan and a tonne and a half in Djizzak.²⁷ Theoretically, in 2008, 60% of *shirkat* should have been transformed into private farms. To this end, families are expected to sign a contract with administrators, who provide inputs and purchase production. Autonomy remains extremely limited. The so-called private operators cannot choose their crops and many are forced to cultivate almost exclusively cotton or wheat. According to the ICG, farmers who have refused to follow directives have had their water cut off or their land confiscated. The state may also repossess the land, often under opaque conditions, usually as sanction for poor performance. In practice, the confiscation of land is part of a system of pervasive corruption, with poor harvests used as a pretext for the confiscation of the best land, which is then redistributed to members of the elite. Whatever the status of land use, the selling price of products is fixed by the authorities, usually at about one-third of the market price; only the surplus can be sold at maximum price. Private farmers (*dehqon*) have only small farms (0.2 hectares), with leases for periods of 10 to 50 years.²⁸ Despite their small size, these farms are more efficient than large ones. They represent only 10% of the agricultural land in Uzbekistan, but produce about 40% of its agriculture. In 2003, over 90% of meat, dairy and potatoes came from private farms.²⁹

In Tajikistan, despite announced reforms, little has changed and land remains state property. Individuals may obtain an inheritable right to work an area over their lifetime, but it cannot be sold or purchased. The state also reserves the option to withdraw operators it deems ineffective. Since 2002, a law authorises the establishment of nominally independent entities over which the operator can choose his crop. In practice, collective farms have simply been re-registered as collective *dehqon*. According to the ICG, farmers working for *dehqon* are still employees, not shareholders. In 2005, the government officially privatised the last 200 large state farms, but these procedures were widely rigged and half of the applications were refused. A common practice is to force farmers wishing to leave their cooperative commitment to devote 70% of their land to cotton, which hampers autonomy. Finally, even when they were allowed to start a private operation, many *dehqon* operators who refused to cultivate what they had been requested to grow have seen their crops destroyed by bulldozers. As in Uzbekistan, smaller farms appear to be more efficient. Independent *dehqon* with less than 50 hectares produce quantities of cotton that are

generally 30% higher than collective farms (24% more for wheat).³⁰

In Turkmenistan, the system has changed much less. It has always been based on respect for the annual state plan. The 'peasant associations' were instructed to distribute by lease 90% of the arable land (1.5 million hectares) to the total rural population. These 350,000 families do not own their land, but have the right and duty to work it. Cooperatives serve as essential intermediaries between the state and farmers, and maintain minimal community infrastructure in villages. However, control remains the domain of the state. Farmers are obliged to complete the harvest, for which planned objectives increase from year to year and the output is bought by the state at prices well below international rates.³¹ While the state remains in control of the selling prices, Turkmen farmers are supposed to be independent in supplying their inputs. As during Soviet times, land plots total only a small surface compared to cooperative farms (0.25 hectares compared to 4 hectares allocated to the tenant for growing wheat and cotton), but guarantee a significant portion of its revenues.³² Operators generally have a lease for a period of five to ten years, but production targets are reviewed annually and the lease is not transferable. The state reserves the right to reclaim the land if the farmer, his family or employees fail to meet the required quota. This action had hardly been applied in the 1990s, but

market. In the other three states, Uzbekistan, Turkmenistan and Tajikistan, many elements of the Soviet agricultural system were maintained. Individual plots or small family farms offer far greater profitability than collective work since they operate at the discretion of its operator, whose adaptability to the local market is greater. As in Soviet times, the productivity of Central Asian agriculture within larger collective structures inherited from kolkhoz and state farms is particularly low.³⁴

The Central Asian Dilemma: Cotton or food self-sufficiency?

Strategic choices regarding production face all states in the region. Developed since the Tsarist regime, cotton cultivation picked up after the seizure of power by the Bolsheviks. In Central Asia, the area devoted to cotton increased from 441,000 hectares in 1914, to more than one million in 1940.³⁵ The monopoly of cotton over the land accelerated after the completion of major irrigation works such as the Fergana Canal in the 1930s, the canal of the Hunger Steppe between Uzbekistan and Kazakhstan and the Karakum Canal in the 1950s, which diverts the waters of the Amu-Darya to the deserts of Turkmenistan. The surfaces covered by cotton continued to increase, reaching 1.4 million hectares in 1960, 1.7 million in 1970, and 2 million in the early 1980s. However, cotton production declined considerably in the 1990s due to the financial difficulties of the new states, lack

Table 2. Cotton production in Central Asia (thousands of tonnes) and as a share of global production

	1913	1940	1970	1980	1990	1994	1998	2000	2002	2004
Kazakhstan	11	72	91	118	102	70	55	85	105	148
Kyrgyzstan	9	31	62	68	25	18	27	27	25	40
Uzbekistan	171	457	1483	2061	1593	1248	1000	975	1033	1125
Tajikistan	11	57	240	334	256	168	110	106	165	172
Turkmenistan	23	70	287	415	437	314	197	187	148	203
Total Central Asia	225	687	2163	2996	2413	1818	1389	1380	1476	1688
World production	6296	6934	11740	13831	18970	18762	18713	19437	19437	26193
% of world production	3.5 %	10 %	18.5 %	21.5 %	13 %	9.5 %	7.5 %	7 %	7.5 %	6.5 %

Source: J. Baffes, "Cotton-Dependent Countries in the Global Context", in D. Kandiyoti (ed.), *The Cotton Sector in Central Asia. Economic Policy and Development Challenges*, London: The School of Oriental and African Studies, 2007.

in recent years the increasingly difficult agricultural situation in the country has led the authorities to confiscate the land of about 2,000 out of 7,000 private farmers.³³

The rural population of Central Asia faces very different realities depending upon the country in question. In Kazakhstan, government policies now focus on the modernisation of large farms, the profitability of extensive farming and improving distribution and quality. In Kyrgyzstan, the primary challenge is to avoid the aggravation of social tensions linked to landlessness and recurrent poverty in mountainous areas, and to help farmers find their niche in a largely privatised and deregulated

of inputs and land degradation. Thus, in 1998, output barely reached 46% of its 1980 level, and in 2004 only 56%.

Cotton constitutes one of the major means for the Central Asian states to gain foreign currency, especially Uzbekistan and Tajikistan. Although maintaining this monoculture obviously allows elites to guarantee huge financial benefits, it also fits into a macroeconomic strategy to fund the large public enterprises in the industrial sector, largely in deficit. Over two-thirds of Central Asian cotton production is exported and the region accounts for 15% of world exports. However, significant variance exists between countries. Although Kazakhstan is

the largest agricultural power in the region, cotton is a very marginal part of its economy. In 2008, Astana only exported 93,000 tonnes of cotton.³⁶ Uzbekistan, however, is the third largest producer and second largest exporter in the world. Over 80% of Russian cotton imports come from Uzbekistan.³⁷ Official figures for 2007 show that 3.5 million tonnes of cottonseed were produced and 1.2 million tonnes of cotton hair. However, the figures put forward by foreign organisations are much lower. Land degradation has contributed to declining production and falling cotton quality, deemed inferior to that of many other producing countries. Tajikistan, the world's 13th largest producer and 9th largest exporter, has meanwhile increased its production, reaching 558,000 tonnes in 2004.³⁸ It appears to have declined again in recent years to 418,000 tonnes in 2007.³⁹ The series of bad harvests was further aggravated in 2008, when production declined to 350,000 tonnes, representing only 64% of the amount forecasted.⁴⁰

Turkmenistan is also among the ten largest producers in the world but, given its wealth in oil, cotton represents only a small share of GDP. In addition, cotton's export earnings have continued to fall. Turkmenistan reported earning \$791 million in 1995, \$332 million in 1996, and only \$84 million in 2005.⁴¹ Steps were then taken to develop on-site treatment in order to be able to sell a finished product at higher prices. Between 1995 and 2000, the share of treated cotton in the republic rose from 3% to 35%. This development of the textile industry is not enough to bridge the shortfall in currencies linked to the decline in production as 95% of Turkmenistan's textile production is exported. As in Uzbekistan, the degradation of soil quality, deterioration of irrigation, a lack of fertiliser and de-mechanisation have depressed production.⁴² Previously estimated at 2 tonnes per hectare, it dropped to 1.5 tonnes per hectare in 2001-2002. Production has declined steadily since, reaching in 2005, the worrying figure of about 715,000 tonnes, despite the government's claim that production exceeded 3 million tonnes. The decline was exacerbated by the irrational decisions of President Saparmurat Niyazov, who imposed in 2003 a specific date for planting even if the weather did not permit it, leading to the loss of a large portion of inputs and forcing farmers to replant two or three times. According to official figures, 800,000 hectares were devoted to cotton in 2004, but the actual area was probably beyond one million hectares.⁴³ Operating surfaces are indeed minimised in the official statistics, allowing local governors to declare higher rates of production per hectare.

Alongside the issue of privatisation of land, the Central Asian states have to face a fundamental contradiction. They can give preference to cotton, which guarantees substantial foreign exchange earnings for the state, or choose to develop vegetable and grain production for the sake of food self-sufficiency. The issue of food safety concerns all states in the region and has now become a particularly sensitive political issue. Indeed, the climate risks (cold winters, excessive rainfall, and drought

during the growing season) that make harvests unpredictable, combined with the rising prices of basic foods, have a direct impact on Central Asian populations, especially in Tajikistan and Kyrgyzstan. The UN Food Programme announced in 2009 that 2.2 million Tajik citizens would be in a situation of food insecurity (34% of the rural population and 37% of urban population), and that some 800,000 were directly threatened by famine.⁴⁴ In Kyrgyzstan, the number of people subject to food insecurity is around one million. The difficulty of states achieving food self-sufficiency requires them to rely heavily on grain imports, particularly on Kazakhstan, which however decided in 2008 to stop its exports to ensure the domestic market.⁴⁵ The most affected regions in Tajikistan are the traditionally poor ones (the Khatlon region and Pamir) but also, paradoxically, Sogd in the north, including the regional capital of Khujand, which was historically one of the richest in the country.

It is therefore necessary to strike a balance between cotton acreage and those devoted to feeding the people. According to the UN World Food Programme, Tajikistan needs 1.2 million tonnes of grain per year but, in the best-case scenario, produces just over half this and is therefore largely dependent on humanitarian aid and grain imports.⁴⁶ In Turkmenistan and Uzbekistan, no reliable figures are available but cases of quasi-famine in some provinces were confirmed. In all the Central Asian states except Kazakhstan, the health of younger generations is impacted by malnutrition. Uzbekistan, with an annual grain production of 5 million tonnes, is expected to be self-sufficient and even exported some of its production (it is the 20th largest exporter in the world). However, shortages of wheat have increased in recent years, particularly in 2008, when Astana agreed to a moratorium on exports. The price of bread has soared throughout Uzbekistan and flour has been unavailable in Khorezm and Karakalpakstan. Trafficking of wheat to the Kazakh-Uzbek border has taken on an unprecedented scale. On the Kazakh side, the Dostyk and Zhartyboe districts in the Sarygash region are known for their traffic in flour towards Tashkent, challenging the official Uzbek stance of self-sufficiency.

Should cotton then be considered a major contributor to the food crisis affecting Central Asia? A Mercy Corps study shows that malnutrition is mainly concentrated in cotton growing areas.⁴⁷ As an essential source of foreign exchange, cotton is at the heart of the corruption of the state apparatus and the lack of wealth redistribution to the people. The ruling circles are enriched much faster through their control of cotton exports than by the profits obtained from vegetable or grain production, which are minimal and difficult to privately control. Some international organisations or NGOs like the International Crisis Group argue therefore for a reduction in cotton production in favour of producing more grain and vegetables. To some experts, this position is excessive; more should be done to reform the agricultural sector, upstream and downstream, so that the rural population has access to the

riches of cotton, rather than replacing it with other products that would continue to finance the system of coercion imposed by states on their rural populations.⁴⁸

2. Political, Economic and Social Stakes in the Agrarian Sector

Upstream: The Exploitation of Farmers

The situation of farmers differs in each Central Asian republic. In the most authoritarian states such as Turkmenistan, Uzbekistan, and Tajikistan, farmers located at the very beginning of supply chain benefit very little from their work, the fruits of which are absorbed by the state structure. Production is planned, purchase prices are ridiculous and coercion is present at all levels of the system. In Kyrgyzstan and Kazakhstan, farmers are more autonomous, selling their products at the world market price, but are prisoners to its fluctuations.

In Turkmenistan, the authoritarian regime especially leaves little obvious choice to farmers. The declines in production experienced by the country have increased pressure on governors who, in turn, exert considerable pressure on farmers to ensure that they meet production quotas. Farmers derive little or no profit from their crops, but receive some compensation from the national company *Turkmenpagta*, which provides free inputs. In Uzbekistan, cotton is less profitable than other crops, but this varies by region.⁴⁹ Prices charged by the state assume that farmers produce at least 2.7 tonnes of seed cotton per hectare, while production averaged just over 2 tonnes in the mid-2000s.⁵⁰ The 2002 reform, intended to liberalise state orders, changed little in practice. Under pressure from the International Monetary Fund, the Uzbek government has begun to align its purchase price to the world market, although these efforts remain modest. Further in a number of areas, particularly the provinces of Samarkand and Tashkent, the state offset the increased purchase price of a tonne of cotton by tripling property taxes. Moreover, farmers have little control over their earnings. Banks routinely confiscate money paid by state and only pay fixed cash sums for the purchase of equipment or inputs, but not salaries or even less profits. When world cotton prices fell as they did in 2004-2005, Uzbek farmers received only 80% of the official price promised by the state. The money is always paid late and not adjusted for inflation. In some cases, the Uzbek farmers are paid in kind with oil or flour.

In Tajikistan, although the situation is theoretically more liberalised, an unwritten rule requires farmers to grow cotton on more than 80% of their plots of land. Many farmers raising other crops have stood accused of breach of contract. A decree adopted in 2008, however, guarantees farmers the right to choose their crops and it appears that cotton has dropped slightly below the 70% level.⁵¹ As in Uzbekistan, laws are established to benefit the cotton magnates, to the detriment

of individual farmers. Amendments to the 2008 land code confirm the complicity of senior officials and landowners, like R. Umarov, one of the largest landowners in the country, since they can take back land from impoverished farmers, who are obligated to cede them to clear their debts. Each year, the Tajik state establishes a production plan that, although presented as a forecast or recommendation, is in practice mandatory. Poor storage and transportation conditions lead to deterioration in the quality of seed cotton, wherein it loses between 20% and 25% of its value at harvest. According to the World Bank, higher cotton prices between 1999 and 2003 gave no advantage to Tajik farmers. Their incomes from cotton were indeed very low. In 2004, the average salary of a cotton farmer was \$7 per month while those who produced anything other than cotton earned eight to 13 times more.⁵² The main cotton-producing area in Tajikistan, Khatlon, with 30% of the population, has an extreme, 50% poverty rate.⁵³ A witness reported that in 2008, on a farm in Yavan comprising of 23 families, the harvest, however good, would have yielded a total of \$3,000.⁵⁴ While officially, farmers receive a salary, many of them are paid in kind, with items such as cotton stalks that can be used for fuel.⁵⁵

The work of children and adolescents in the cotton fields, especially during the harvest, is one of the biggest controversies in the Central Asian agricultural sector, especially Uzbekistan, Tajikistan and Turkmenistan. Each year in Uzbekistan, about 450,000 children are forced to leave school and participate in the cotton harvest.⁵⁶ Recruitment is compulsory for children between the ages of 10 and 15 years; they are employed in the fields between 51 and 63 days per year without weekend breaks.⁵⁷ The testimonies of several farmers denounced the use of very young children. A child is supposed to pick up to 80 kilos of cotton per day, but many of them cannot harvest even 40 kilograms. About 3 cents is paid per harvested kilogram, thus those who manage to collect the 80 kilograms earn between \$2.50 and \$3 a day.⁵⁸ Officially, the Uzbek regime explicitly prohibited child labour in 2008. However, it is unlikely that this law is enforced since without the virtually free work of children and adolescents, the harvest could not be completed and the state would not be able to pocket the profits.

In these three states, students are also subject to high pressures. They generally cannot refuse to participate in the harvest under penalty of being expelled from university, unless they pay for a false medical certificate, which gives rise to considerable corruption. According to several reports, some students buy kilos of cotton from neighbouring farmers to avoid sanctions and are therefore in debt when they leave the fields. They are paid such a trifling; a large part of their official salaries goes to room and board, while they are housed in rustic conditions and fed in a meagre manner. Another moral issue is related to the displacement of populations, widely practiced during the Soviet regime, which continues today in some republics. Cotton and, more generally, farming, actually give rise to forced displacement, such as in Turkmenistan, where thousands of

people were sent from the south to the north near the Aral Sea to work in the fields. The mass migration of working-age men from Tajikistan and Uzbekistan to Russia inevitably leads to growth in the number of women and children in the fields. Thus, in the cotton-growing areas of Tajikistan, women represent between 85% and 90% of the workforce.⁵⁹ In the province of Khatlon, 70% of women would be willing to pick cotton stalks after the harvest for use as fuel.

Finally, the disappearance of the Soviet system led to a rapid de-mechanisation of the agricultural sector, which aggravates human exploitation. Rising fuel prices, a lack of spare parts and difficulty repairing Soviet tools do not foster technological development. In Turkmenistan, farmers are obliged to use machinery from the state firm *Türkmenobahizmat*, but the prices for its technical assistance are exorbitant. The Turkmen government is spending huge sums to buy foreign equipment—the procurement of which generates many kickbacks—but it can hardly be used due to a lack of technological knowledge, spare parts or money for upkeep. There are only about five machines to harvest cotton in each province that are actually operational.⁶⁰ Moreover, liberalisation of input prices makes the use of machines more expensive, which encourages harvesting by hand. These countries are increasingly affected by unemployment, and deliberate de-mechanisation ensures the use of the largest possible number of individuals, thus reducing risks of social tension. Manual harvesting remains therefore largely favoured: in Uzbekistan, the share of mechanised harvest fell to 57% in 1990, 35% in 1993, and is probably less than 20% today.⁶¹

In border areas, many farmers try to circumvent state obligations through smuggling. Uzbek farmers, for example, can sell their cotton in Kyrgyzstan for five times the price at home. In 2003, the purchase price of a tonne of cotton in Uzbekistan was \$50 to \$80, while the price ranged between \$250 and \$320 on the Kyrgyz market. Considerable traffic is also noted along the Turkmen-Uzbek border, where the Uzbek farmers try to sell to their neighbours a portion of their output in exchange for fuel. This trade helps the Turkmen farmers and local authorities, under pressure by the state planification. During the harvest season, Uzbek farmers also seek to move towards the border of Kazakhstan to work for much more consistent wages. Therefore the failure of the Uzbek government to properly pay its farmers fuels trafficking of any type. Finally, Central Asian agriculture poses many environmental problems: the poor condition of irrigation structures, which have particularly high loss rates; overuse of water by farmers; difficulty in demanding payment for its use, given the low rural standard of living; high salinity (according to the World Bank, over 60% of irrigated cropland in Central Asia is affected by the problem of salinisation);⁶² and the degradation of soil quality and its impact on public health.

Downstream: The Corruption of State and Intermediary Companies

Although profits from cotton production are expected to help finance other parts of the economy, they actually substantially divert funds, amputating the expected benefits. Cotton receives particularly bad press and is perceived by the population as an essential element of political and economic elite corruption.

In Uzbekistan, most cotton is sold to the state-controlled company *Uzpakhtasanoat*, which then sells it to import and export enterprises approved by the government. Officially private, these companies are under the thumb of the ruling clans, especially the SNB. Foreign buyers are forced to enter into agreements with approved national companies, which generally require a prepayment of 30% to 80% of the amount, advanced by foreign banks operating in Tashkent like *Crédit Suisse*, *Société Générale* and *ABN-AMRO*. A large majority of private cotton exporters are actually members of a clan in power and manage their business through offshore companies registered in the British Virgin Islands and Cyprus. They give themselves the highest quality cotton, leaving the inferior quality materials to *Uzpakhtasanoat*. Although a portion of revenue is supposed to be redistributed to the agricultural sector via three state banks—*Pakhtabank*, *Ghallabank* and *Zaminbank*—this redistribution could not be more opaque. According to the ICG, only 10% to 15% of revenues earned through the sale of cotton return to the domestic agricultural sector.⁶³

The corruption of political elites seems equally apparent in Tajikistan. District governors negotiate directly with potential buyers and force farmers to grow cotton. In some cases, the governor even has direct financial interests in the local treatment plants. The country is also affected by the phenomenon of the so-called ‘future companies’. In the mid-1990s, when the government could no longer finance the cotton sector, it appealed to middle market companies, which, with backing from foreign lenders, provided loans for necessary inputs in exchange for a certain quantity of cotton at the end of the harvest. Tajik farmers thus find themselves caught in a trap from which they find it very difficult to escape, as the interest rate is between 10% and 20%. Many fail to repay the debt they have incurred, and are therefore forced to borrow again to ensure the next harvest.

In 2008, these debts exceeded \$500 million.⁶⁴ Some of these companies are closely linked to ruling political circles and have managed to impose their rules in most producing regions. In the south, they are in a monopolistic situation and with the support of local government, have forced their potential competitors to withdraw. Tarnished by scandals, the Tajik government was forced by the international community to address the problem of ‘future companies’. To put an end to these intermediaries, it has asked banks to issue loans directly to farmers, with the help of the state which made available \$41 million in 2008.⁶⁵

However, banks have received this money at an annual interest rate of 12% and in turn lend it to farmers at rates ranging from 14 to 22%.⁶⁶ This new system has raised many controversies. Only one-third of farmers could meet their debts, according to official sources from the Ministry of Finance, while two banks, Agriinvestbank and Orion Bank, said they were unable to repay loans.⁶⁷

Recommendations

It is difficult for the EU to influence the development of Central Asian agriculture for several reasons. First, many factors (the speed of reform of private property and the function of central and local governments) fall within the domestic political realm and interference there would be unwelcome, especially as agriculture, particularly cotton, is often in the hands of presidential families or powerful clans. Secondly, because the incentives for a more visible commitment of the EU in this area belong mainly to the private sector, states cannot impose political objectives that run counter to the market economy. However, the EU does have several levers of influence at its disposal.

Negative Incentives

In 2008, after repeated action from human rights groups against forced child labour in cotton harvesting in Uzbekistan, the largest British supermarket chain, TESCO, declared that it would henceforth refuse to sell Uzbek cotton, a stand backed up by other large textiles consumers such as Wal-Mart, Hennes & Mauritz, JC Penney, and Marks & Spencer.⁶⁸ Other companies have refused the boycott, including the International Cotton Advisory Committee (ICAC). The refusal to buy Uzbek cotton has forced authorities to agree to discuss this topic and to pass a law prohibiting the exploitation of children in this sector. The pressures have therefore, in principle, borne fruit, even if enforcement will be very difficult to implement.

- Consider similar measures against cotton from Tajikistan and Turkmenistan, where children are also exploited;
- Discuss with Russia, the main buyer of Uzbek cotton, the proposition that they should invite Russian importing companies to join the boycott; and
- Consider the possible exclusion of Uzbek cotton from the EU's concessions under the Generalised System of Preferences.

Positive Incentives for the Private Sector

The EU cannot determine the economic establishment of European companies in the agricultural sector. However, European firms have been successful in many areas that could help the development of the Central Asian agriculture. The high cost of European services for Central Asian states could be compensated by implementing mechanisms like special tax reductions, advantageous bank loans and legal aid in setting up business.

- Set up an EU expert panel charged with listing the agriculture sectors that could benefit from the EU's possible aid mechanisms, including: the promotion of renewable energies for agriculture, like solar panels; the implementation of sustainable irrigation through a run-off system; and the sale of seeds that can grow in dry lands with limited irrigation and of natural, chemical-free fertilisers.

Focusing Development Programmes on the Agricultural Sector

The EU needs to prioritise its commitments in the Central Asian agricultural sector: it is still the livelihood for half of the population and therefore cannot be considered secondary in the prospects of development and the fight against poverty, which is predominantly rural.

- Fight against malnutrition of children in rural areas through specific programmes of cooperation with local health authorities;
- Propose to the European Bank for Reconstruction and Development (EBRD), the Asian Development Bank (ADB) and the World Bank the development of the agrarian banking sector in such a way as to fight against the excesses of intermediary corporations; require large international banking structures to develop partnerships with local banks to offer banking products to farmers; promote the concept of micro-credit as practiced by the Aga Khan Foundation; and for individual or family development projects, offer a range of modest banking products that avoid debt traps and limit government corruption;
- Focus over the long term on food safety issues. Three major areas appear to be central: develop grain cooperation between Central Asian states by inviting Kazakhstan to become a leader in the regional cereal market; finance storage facilities and granaries that secure supply during winter months and reduce losses due to poor packaging during transport and storage; develop livestock and thus access to meat products by promoting fodder for this sector, which is now neglected even as it is vital to recovery;
- Assist in the conversion of the textile industry in Central Asia; only the sale of already treated finished products, not raw cotton, could increase revenue from the commodity and slow de-industrialisation. In Turkmenistan, the sector is in the hands of Turkish businessmen close to the President and hence does not seem open to European companies, but Uzbek and Tajik authorities have requested international cooperation in this field.

Bilateral Negotiations

- Establish an EU-Kazakhstan committee to help the country reform its grain sector in the areas of product certification and traceability;

- Make an issue of the transparency of state corporations purchasing cotton to farmers as one of the main criteria for good governance in order to put pressure on all five Central Asian regimes.

In the Framework of the EU Education Initiative

Many issues related to improving the quality of life in rural areas obviously depend on the goodwill of governments, but also on the ability of the players themselves—the farmers—to manage their business in an environmentally sustainable manner for their own quality of life. China has already started to invest in this sector by establishing partnerships between the Agricultural University of Almaty and the one in Urumqi; cooperation between Russia and Central Asia also exists in this area.

- Develop cooperation with Central Asian agricultural academies of higher education. Some EU countries—like France, Spain and Poland—have vast experience in agriculture and have reformed their specialised education system; their experiences could be exported to Central Asia through joint projects like student and teacher exchanges, help with professional training and changes in the curriculum.

Conclusion

Although the EU is not a major player in Central Asian agriculture, the sector remains a key factor for the stabilisation of the region. The fight against poverty will largely hinge on improving the working and living conditions of a still largely rural population which are sometimes close to international legal standards for human exploitation. Slowing the cycle of de-industrialisation and over-specialisation in raw materials is directly linked to opportunities to develop textile and food-processing enterprises in the economies of Central Asia. The objective of food security calls for international support for grain and vegetable production as well as storage and distribution infrastructure, which have always been a weak link in Soviet and post-Soviet economies. Finally, the extreme corruption of the state apparatus related to agriculture—cotton export networks, mafia banking structures and control by the clans in power of the prices for inputs and machinery—exacerbates feelings of injustice and undermines the state legitimacy, which play into the hands of Islamist movements that call into question the social order in Central Asia.

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