

INSTITUTE OF SOCIAL STUDIES

Working Paper Series No. 243

**AGRARIAN TRANSITION IN THE FORMER SOVIET UNION CENTRAL ASIA
STAGNATION AND PROGRESS**

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April 1997

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Abstract

This paper reviews the post-1991 process of transformation of the agrarian sectors in the five Central Asian States (CAS) of the former Soviet Union (FSU), Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. A detailed assessment is presented of the agrarian transition in the CAS, after more than half a decade of reforms and structural transformation the current state of transition in these largely rural parts of the FSU. In most of the CAS the transition is seen as 'slow' or 'gradual', in particular in Tajikistan, Turkmenistan and Uzbekistan, while Kyrgyzstan and Kazakhstan are considered to have progressed more rapidly.

The paper uses a comparative method to show that agrarian transformation in the FSU are extremely complex and often contradictory processes, in which various interrelated factors - apart from agrarian reform policies- play a crucial role: (i) initial conditions, such as the role of agricultural in the national economy and its structural features; (ii) the dynamic interplay between macro-economic adjustment policies and sectoral development. The paper challenges the mainstream position which claims that between the pace and extent of privatization and market liberalization in transitional economies, and their speed of recovery, exists a simple positive causal relationship, as is put forward quite forcefully in the most recent World Development Report (1996).

The agricultural sector reforms are reviewed, with special attention to Kazakhstan, Kyrgyzstan and Uzbekistan, showing that in spite of the slow land privatization and the formation of only an incipient private family farm sector, a wide variety of farm-types and production arrangements is appearing, which points to a dynamic and diverse development, also in case a country scores low on a 'reform index'. The paper concludes that in these transitional processes no simple recipes nor ideal outcomes exist, but mainly complex dynamics and unexpected, and sometimes unintended results of adjustment policies. Micro- and macro-efficiencies in agricultural production are changing, but much will depend on the formation of an accessible and competitive market environment in which these new (often family-run) farm units can operate. Institutional reforms and transformations in this respect have until now been quite insufficient in all five CAS.

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Abstract

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AGRARIAN TRANSITION IN THE FORMER SOVIET UNION CENTRAL ASIA STAGNATION AND PROGRESS

Max Spoor

I. INTRODUCTION

This paper reviews the post-1991 process of transformation of the agrarian sectors in the five Central Asian States (CAS) of the former Soviet Union (FSU), Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. After more than half a decade of reforms and structural transformation the current state of transition in these largely rural parts of the FSU warrants a detailed assessment. In most of the CAS the transition is seen as 'slow' or 'gradual', in particular in Tajikistan, Turkmenistan and Uzbekistan, while Kyrgyzstan and Kazakhstan are considered to have progressed more rapidly (as measured in for example the 'Reform Progress Index' of the World Development Report, 1996).

Nevertheless, recent research points to rather contradictory phenomena in 'agrarian transition' processes (Spoor, 1995). Lerman, et al. (1996) note that a variety of 'land relations' and forms of 'farm organization' have developed in Uzbekistan, generally seen as one of the 'non-reformers'. While calling for deepening of reforms, in particular towards privatization of land, seen as a precondition for farm efficiency, the diversified and dynamic nature of current farm restructuring is recognized.¹ Delehanty and Rasmussen (1995), analyzing the Kyrgyz case, which is often hailed as the show case of reform amongst the CAS, come to the conclusion that much of the transformations were initially 'cosmetic'. Even after the new push in agrarian reforms during 1994-95 the private farm sector remained relatively small, while other 'reformed sectors' such as joint stock companies, cooperatives and peasant associations still resemble much of the features of -largely inefficient- Soviet management practices.

The paper uses a comparative method to show that agrarian transformations in the FSU are extremely complex and often contradictory processes, in which various interrelated factors -apart from agrarian reform policies- play a crucial role: (i) initial conditions, such as the role of agriculture in the national economy and its structural features; (ii) the dynamic interplay between macro-economic adjustment policies and sectoral development. In pointing to the complexity of agrarian transition the paper challenges the mainstream position which claims that between the pace and extent of privatization and market liberalization in

transitional economies, and their speed of recovery, exists a simple positive causal relationship, as is put forward quite forcefully in the recent World Development Report entitled *From Plan to Market* (World Bank, 1996). Although the supposed positive correlation, that is the foundation-stone of the World Bank's conclusion, can already be questioned on statistical grounds, as is shown by Kekic (1996), our argument against this one-to-one relationship will be of a more analytical and qualitative nature.

In part two a brief analysis is presented of the macro-economic crisis that affected the CAS after 1991, emphasizing the influence of resource endowments, initial conditions and the differential impact of macro-economic contraction at a sectoral level. Part three focuses on two aspects of the agrarian transition: the land privatization process, and the break-up of the state-dominated agricultural marketing and distribution systems under the influence of market liberalization and deregulation. The agricultural sector reforms are reviewed, with special attention to Kazakhstan, Kyrgyzstan and Uzbekistan, showing that in spite of slow privatization and the formation of only an incipient private family farm sector, a wide variety of farm-types and production arrangements is appearing, which points to a dynamic and diverse development, also in case a country scores low on a 'reform index'.² In the final part some conclusions are drawn, which underline the basic argument in this analysis: in these transitional processes there are no simple recipes nor ideal outcomes, but mainly complex dynamics and unexpected, and sometimes unintended results of adjustment policies. Micro- and macro-efficiencies in agricultural production are changing, but much will depend on the formation of an accessible and competitive market environment in which these new (often family-run) farm units can operate. Institutional reforms and transformations in this respect have been quite insufficient until now in all five CAS.

II. THE CENTRAL ASIAN ECONOMIES IN CRISIS (1990-95)

All FSU republics suffered from severe economic contraction in the past years. The Central Asian States are no exception to this rule, as sustained negative growth can be observed in all of them since 1991 (Table 1), sometimes even starting earlier (Spoor, 1996). Kazakhstan and Kyrgyzstan saw their GDP, by the end of 1995, being reduced to around 46 percent of the 1990 level; Tajikistan's GDP, suffering from the impact of civil war, even declined to

36 percent. For Turkmenistan (in spite of the rich oil and gas reserves) the 1995 level stood at 64 percent; while finally in Uzbekistan, the largest economy in terms of population, GDP had decreased to 82 percent, being relatively the 'best' performing economy.³

Table 1: GDP Development Central Asian FSU States (1990-1995)

% Change (p/a)	1990	1991	1992	1993	1994	1995
Kazakhstan	-0.8	-11.8	-13.0	-12.9	-25.0	-8.9
Kyrgyzstan	3.2	-4.2	-16.4	-16.4	-26.0	-6.2
Tajikistan	-1.6 ^a	-8.7 ^a	-31.0	-17.3 ^b	-21.3 ^b	-12.4
Turkmenistan	1.8 ^a	-4.7 ^a	-11.0	-6.0	-15.0 ^c	-6.0 ^c
Uzbekistan	1.6	-0.5	-11.1	-2.4	-4.0 ^d	-1.0 ^c

Notes:

January-May 1995 estimate; Other 1995 data come from StatKom (1996) that was published in January 1996, most likely to be taken as estimates as well, but for the whole of 1995.

^a As estimates for GDP are lacking, NMP (Net Material Product) growth is used.

^b EIU (1995) estimated NMP growth at -27.6 and -20.0 percent for 1993 and 1994 (suggesting a somewhat greater drop in GDP). World Bank (1996) gives -15.0 percent for 1994. The data in the table is taken from StatKom SNG (1995).

^c EIU (1995) estimated NMP growth in 1994 to be positive (!) at 1.7 percent. The different GDP figure of the CIS Statistical Committee is used here. Differences cannot be explained but the EIU suggests that the original IMF estimate cannot be justified.

^d EIU (1995) gives -2.6 percent for 1994. Statkom SNG (1995): -3.5 percent.

^e World Bank (1996:173) gives -2.0 percent for 1995.

Sources: EIU (1995); Zhukov (1995); World Bank (1994c); Spoor (1995); Statkom SNG (1995); StatKom SNG (1996); Author's Calculations.

In comparison with the average GDP for all the CIS countries, which was 58 percent of the 1990 level, the Russian Federation being at 62 percent, the CAS performance was widely fluctuating around the average (StatKom SNG, 1996:11). Taking furthermore into account the substantial out-migration of skilled labour from Kazakhstan and Kyrgyzstan, the drought that hit the region in 1991, and the civil war that raged in Tajikistan, the economic situation is without any doubt precarious. Nevertheless, according to the latest reports the bottom-line of decline seems to have been reached in Kazakhstan and Kyrgyzstan, and a further contraction in the Uzbekistan economy, in which industry grew in 1995, has been contained (see EIU, 1996; EBRD, 1996).

During the Soviet era, the CAS benefited structurally from the All-Union Budget transfers that provided investment resources for agricultural, industrial and mining infrastructure or social sector institutions. Nevertheless, the development model of the CAS

within the Soviet Union, reflected the increasingly one-sided inter-republican division of labour, in which countries such as Uzbekistan, Turkmenistan and Tajikistan specialized in cotton, known as 'white gold'; Kyrgyzstan emerged as one of Soviet Union's main wool producers, and a supplier of uranium, gold and mercury; Kazakhstan became a bulk grain producer, with the expanded areas of cultivated land as a result of the virgin lands campaign of Khrushchev in the 1950s, while simultaneously developing oil and gas production, just like Turkmenistan. This inter-republican division of labour also created dependency on monocultures, while the consequences of ruthless exploitation of natural resources with a general disregard of the environment remains a major long-term problem for public health and socio-economic sustainability. Furthermore, most of the CAS (with the exception of Kazakhstan) imported more and more food, while also agricultural and industrial inputs came from elsewhere. On the one hand, many of the raw materials or primary agricultural products were 'exported' to other republics of the USSR without any form of processing, while relatively little local processing capacity was built locally.⁴ On the other hand, industry was established with a total disregard of comparative advantage by simply subsidizing transport costs between the centre and the periphery.

Because of the structural dependency that grew between the 'centre' and the 'peripheral' economies of the CAS, the disintegration of the Soviet Union had a dramatic impact on them. Previous inter-republican trade had more the character of planned transfers at the level of a central ministry or a *kombinat* (industrial complex), and markets (if one can speak of markets in this context) were purely captive ones. After 1991, the CAS were forced to pay much more (sometimes at world market price level) for their imports, while on the other hand traditional export markets for cotton, wool, gas, oil and meat could not immediately be replaced by hard currency market outlets. Hard currency payments within the CIS for exports from the CAS are often delayed or even refused. The external shock caused by the disintegration of the FSU, particularly affected those CAS with sectors largely dependent on forward and backward linkages within the former Soviet economy, such as Kazakhstan and Kyrgyzstan, with their industry, while those economies with substantial primary sectors (agriculture and mining) were able to provide a cushion to the shock.

III. AGRICULTURAL SECTOR REFORM

A large part of the population in the CAS is rural, such as in Uzbekistan and Kyrgyzstan where the share is around 63 percent. Agricultural production represents an important share of GDP, with sub-sectors such as cotton (Uzbekistan, Turkmenistan and Tajikistan), wheat (Kazakhstan) and mutton and wool (Kyrgyzstan). For example, in the two most industrialized CAS, Kazakhstan and Uzbekistan, agriculture contributed 31.4 percent to Net Material Product (NMP) in 1993 in the former, while this was 33.6 percent in the latter (1994). Nevertheless, the share of industry in GDP is still slightly larger, mainly because of the extraction (and in some cases processing) of mineral resources, such as gas (Uzbekistan), oil (Kazakhstan), coal (Kyrgyzstan), aluminium (Tajikistan), tungsten, gold, and the production of thermal energy. A comparison of NMP data in the last year before the collapse of the Soviet Union shows that Kazakhstan had the strongest industrial sector of Central Asia, followed by Uzbekistan, with the other republics depending largely on agriculture and mineral resource exploitation.⁵ In particular because of the above noted inter-republican dependency relations of industry, and its incapacity to compete in foreign (non-CIS) markets, the contraction in this sector was dramatic (Spoor, 1996). In contrast, the agricultural sector was less affected during the first half of the 1990s, although grain production in Kazakhstan showed a negative trend, with large production declines in 1991 and 1995 (see Table 2).

Why such differential impact of the economic crisis during the transition? Firstly, agricultural production such as cotton, grain, meat and wool formed a nationally integrated production process, depending only on some external (extra-republican) inputs. Therefore the disintegration of the former USSR in 1991 had a smaller direct impact on the agricultural sector of the CAS. Secondly, it seems that although the Terms of Trade generally did not improve, as the costs of inputs (fertilizers and pesticides) went up much faster than output prices, although the importance of newly demanded high value agricultural products (such as vegetables) grew, stabilizing agricultural incomes at least somewhat. Thirdly, agricultural commodities, in particular food staples, remained 'marketable' with relatively little competition from imports. Fourthly, specifically for the important cotton sector, the revenues earned with hard currency exports (such as in Uzbekistan and Turkmenistan), provided finance for the import of spare parts, fertilizers and pesticides, which previously were

transferred, or bought at administrative prices. These factors have contributed to the fact that agriculture became a cushion to the shock of economic contraction in the CAS.

Furthermore, initial conditions of the major economic sectors at the outset of the transition were quite different for the five CAS, whether it be industry, agriculture or the important sector of mineral resources. They have played an important role as to the impact of the reforms, and overall in the outcome of the transition process so far. For agricultural production this diversity can be shown by looking at the major agricultural crops (Table 2).

Table 2: Output Main Crops Central Asian FSU States (1990-1995)

(x 1,000 t.)	1990	1991	1992	1993	1994	1995
<i>Grain (cleanweight)</i>						
Kazakhstan	28,488	11,992	29,772	21,631	16,454	9,514
Kyrgyzstan	1,503	1,374	1,516	1,508	1,063 ^a	991
Tajikistan	313	286	257	253	250	240
Turkmenistan	449	517	737	974	1,130 ^b	1,011
Uzbekistan	1,899	1,908	2,257	2,142	2,467 ^c	3,200
<i>Cotton</i>						
Kazakhstan	324	291	252	200	206	180
Kyrgyzstan	81	63	52	42	54	72
Tajikistan	842	814	442	542	529	417
Turkmenistan	1,457	1,433	1,300	1,341	1,283 ^d	1,304
Uzbekistan	5,058	4,646	4,128	4,234	3,938	4,200
<i>Potatoes</i>						
Kazakhstan	2,324	2,143	2,570	2,296	1,953	1,720
Kyrgyzstan	365	325	362	308	310	431
Tajikistan	207	181	167	147	140	110
Turkmenistan	35	30	39	32	30	11
Uzbekistan	336	351	365	473	562	500

Sources: EIU (1995); World Bank (1994c); Spoor (1995); StatKorn SNG (1995, 1996).

Notes:

- ^a In 1994 the grain situation (food and feed grains) had become so precarious that the Kyrgyz government had to make an urgent plea for EC food aid.
- ^b Although official sources give the figure of 1,1 million tons, in a recent interview by the author with a high Turkmen official (December 1995, Ashgabad) this was scaled down to 0.8 million tons.
- ^c Although the precise output figure is missing here, the grain acreage increased from 347,000 ha in 1993 to 643,000 ha in 1994 (with a plan to reach 972,000 ha in 1995!).

The data presented above on grain, cotton and potatoes output during the 1990-1995 period, reveals some interesting features. Firstly, Kazakhstan's crisis with respect to grain production is obvious, although there were also violent fluctuations in output visible, mainly caused by weather conditions. Also in Kyrgyzstan this sector contracted, a phenomenon that was in both

cases related with the severe crisis of the livestock sector. Grain output was greatly affected by the dramatic decrease in demand for feed grains (Liefert, 1995:4), as there was a shift towards less meat consumption, and areas reserved for fodder production shrank dramatically (Table 3). Nevertheless, other factors, such as the strong decrease in fertilizer application, also contributed to the decline. For example, in Kazakhstan the use of fertilizers dropped from 26.8 kg/ha (during 1986-90) to only 5.4 kg/ha in 1994 (USDA, 1995:10). Secondly, Turkmenistan and Uzbekistan have begun with stimulating their grain production, mostly by diverting irrigated cotton lands to grain cultivation, a development which was already set in under Gorbachev. Thirdly, the cotton sector was negatively affected, although cotton output dropped less than might have been expected, because of the access to foreign exchange revenues that guaranteed the purchase the necessary inputs, such as fertilizers, pesticides, machinery.

The Soviet inter-republican division of labour and the management system dominated by state (*sovkhos*) and collective (*kolkhoz*) farms, had caused major macro- and micro inefficiencies to agricultural production.

Table 3: Changes in Land Use in FSU Central Asia (1990-1994)

	Sown Area	Grain	Industrial Crops				Pota toes	Vege Tables	Fodder
			Sub Total	Cotton	Sugar	Sun Flower			
Kazakhstan									
1990	35,182	23,356	440	120	44	137	206	71	11,065
1994	31,672	20,706	604	111	56	281	218	75	10,054
Kyrgyzstan									
1990	1,294	538	62	30	0	—	25	21	641
1994	1,248	586	87	26	10	—	34	22	516
Tajikistan									
1990	824	230	315	304	—	—	15	23	229
1993	793	279	289	275	—	—	12	23	180
Turkmenistan									
1990	1,232	187	625	623	—	—	4	35	338
1993	1,324	435	580	579	—	—	4	21	266
Uzbekistan									
1990	4,194	1,008	1,876	1,830	—	—	42	140	1,040
1994	4,236	1,522	1,579	1,538	—	—	53	157	877

Source: Statkom SNG (1995)

These are well documented in the economic literature on the FSU. Nevertheless it is still difficult to say whether the shift towards national grain self-sufficiency (Table 3) reflect a transition to a more rational specialization pattern, as there are too many price and market distortions (such as monopolies, protection etc.) to provide a judgement on the basis of 'comparative advantage'. The change in crop-mix shows the determination of countries such as Turkmenistan and Uzbekistan to reach a situation of food self-sufficiency, even at high costs, as imported grain from Kazakhstan (if available) in some cases would be relatively cheaper for both countries.⁶ For Uzbekistan and Kyrgyzstan, this 'food first' strategy is also visible in the potato sector that expanded.

a) Farm Restructuring

Rapid privatization of state and collective farms in the FSU is generally seen as crucial in restructuring the farm sector. However, until now it has proven to be very difficult to execute. According to one World Bank study, by early 1993 only 8 per cent of the farm sector in Russia was really privatized (Brooks and Lerman, 1994:42). Also in recent years, the process has remained very slow and complex (Czaki and Lerman, 1996). Many changes - like the formation of joint-stock companies, farmer's cooperatives and forms of limited liability partnerships (*tovarishchestvo*)- represent formal rather than real changes (*Ibid*). This development reveals the existence of political and social forces that represent vested interests, but in some cases it also points to certain hesitations amongst the farming population to embark upon private farming in view of often non-existent or malfunctioning rural input, output and credit markets.

In the CAS similar phenomena can be observed with respect to land reform, albeit with substantial country specific factors involved. Why is there still relatively little land really privatized (although the governments of the CAS consider some of the above mentioned -mostly quite superficial- ownership transformations as 'privatization')? There are a number of reasons. Firstly, there are insufficient incentives to break away from the remaining collective structures. New markets for inputs and outlets for agricultural production are emerging in a very slow and fragmented manner, while credit for private farmers is often not available.⁷ Furthermore, the social infrastructure of education and public

health is still related to the old parastatal or collective structures. Secondly, the rural *nomenklatura* clings to power, or even hopes to increase it. Keeping the previous structures intact (albeit under another name) gives the *nomenklatura* better options to remain in social and political control of the rural areas (Spoor, 1995). Nevertheless, when privatization of land is taking place it is also the former party elite that seems to get control over most of the best land. Newly established enterprises (joint stock companies, peasant associations, cooperatives, etc.) are still closely tied to remaining large-scale state trading and processing companies (such as in Uzbekistan and Kazakhstan), forcing them to keep their structure and previous forms of operation intact. Private peasant farms -often physically still within the perimeters of the former *kolkhoz*- still depend on the farm manager of the latter for inputs and sales (Lerman, et.al, 1996). Thirdly, in many cases agricultural production heavily depends on existing large-scale irrigation systems. There is a fear that the break-up of the large production units into small peasant farms will lead to deterioration of the existing irrigation structures (*Ibid*). Fourthly, the governments of the CAS genuinely fear, that a land privatization process will lead to conflicts along ethnic lines, as were witnessed in 1990 in Osh, where access to land was a major issue in the violent and bloody riots between Kyrgyz and Uzbeks. Equally so, there are future tensions to be expected in Kazakhstan, in particular between the Russian farming population in the Northern plains and the Kazakhs. Therefore, although leasing of land (often with rights of heritage, and long periods of leasehold) has been the most advanced step on the road to privatization, most land is still owned by the state. Distribution of usufruct rights to farm on small plots of state-owned land by households is wide-spread, while sub-contracting of collective land to households, forming 'private' peasant farms, has recently emerged in response to popular demand for land (Craumer, 1995; Delehanty and Rasmussen, 1995; Spoor, 1995; Lerman, et.al, 1996). However, there is still no sustained movement visible of an economically viable private farm sector.⁸

In Table 4 it can be seen that the agrarian reform -in terms of the formation of private family farms- has actually seen limited progress in Kazakhstan, Kyrgyzstan and Uzbekistan, and even very little in Tajikistan and Turkmenistan. Nevertheless, there is a widespread misunderstanding that privatization in the agricultural sector has advanced very much in the CAS which are considered as the 'reformers' of the CAS (Kyrgyzstan and to a lesser extent

Kazakhstan) and absent in the 'non-reformers' (Uzbekistan, and even less Tajikistan and Turkmenistan).⁹ Actually, most of formal land reform has taken the shape of paper changes, where state farms transformed into joint-stock companies or cooperatives, collectives into limited liability partnerships or leasehold companies. Often the change meant nothing more than taking away the old name plate above the main gate and hanging a new one there.¹⁰ Nevertheless, land in the CAS has been 'privatized' in different ways, which makes it also difficult to assess what share of agricultural land is currently in private usufruct or *de jure* ownership (Lerman, et.al, 1996:165). As in the Soviet era, more land is in private use than is noted in official statistics. Previously, members of collective farms or workers on state farms had a small family plot, which produced a substantial part of the household cash income. In the post-1991 period additional land has been privatized in this manner. Therefore, what is not shown in Table 4, is a strong increase in the private household plots and *dacha*-gardens or orchards (that also already existed in the Soviet-era), but more importantly, in the use of contracting schemes within the currently remaining collectives (Khan, 1996:77).

An example of the deliberate expansion of household plot production is Uzbekistan, where by early 1993 nearly 500.000 hectare (around 12 percent of total arable land) had been held in the form of private (leasehold) household plots. During the period 1989-1992 nearly half of this land had been distributed in order to satisfy the increasing private demand for land (Lerman, et.al, 1996:157).¹¹ Most of this land was indeed fractionated into tiny pieces (EIU, 1993). During 1993 nearly all *sovkhos* (state farms) were transformed into joint-stock companies, while some divided up into a number of collectives (Khan, 1996). However, the formation of a new private farm sector remains rather incipient. In some cases land issues led to ethnic tensions, mainly concentrated in the densely populated Ferghana Valley (bordering Tajikistan and Kyrgyzstan). Since February 1994, supported by a number of presidential decrees on private property and entrepreneurship, land was distributed (actually leased for long periods of time) to peasant farmers, based on a minimum area per head of cattle owned -varying between 0.3 and 2.0 hectares/head- in order to promote the emergence of viable peasant farms (Republic of Uzbekistan, 1994:77,90). For this purpose another 100,000 ha was reserved for distribution in 1994. Interestingly enough, in one of

these decrees, the government of Uzbekistan showed itself to be extremely self-critical about the economic reforms in rural areas which were seen as 'extremely slow and superficial' (*Ibid*:83). In November 1994, a field visit to an area near to Tashkent, confirmed that these decrees had indeed started to be put into practice, with farmers obtaining between 10-20 hectares of land. However, with the system of allotting land through the powerful governors and mayors, vested private interests in the public sector promote privatization of land to the benefit of the rural *nomenklatura*. Even with the most recent government decisions on land distribution, land ownership is still a monopoly of the state, while peasant farmers can obtain leasing (or usufruct) rights.¹² The latter are partly exempted from taxes but are still obliged to sell a substantial part of their output (cotton, grain, meat and milk) to the state at 'negotiated' (below market) prices, while much of their inputs come from the former *kolkhoz* from which they broke away.

In Kyrgyzstan land reform -although having progressed somewhat further- is also not without contradictions. With a recent history of violent conflicts between Kyrgyz and Uzbek people in the *oblast* of Osh¹³, land privatization contributed to further inter-ethnic tension in 1992. However, with an increasingly depressed economy and a collapse of marketing, the privatization programme was suspended until the beginning of the 1993 agricultural season. In that year land reform again showed modest progress, in particular the (mostly formal) transformation of state farms into joint-stock companies. Nevertheless, during this period, the government gave special support to state and collective farms with an Emergency Programme (World Bank, 1993a:126), a move that provided a strong disincentive to start private farming. In early 1994, at the same moment as in Kazakhstan and Uzbekistan, the Kyrgyz government gave a new impulse to the reform process, reducing procurement quota that private farms needed to sell to the state. While land is still state owned, private farms got usufruct rights for 49 years (in 1995 extended to 99 years; Delehanty and Rasmussen, 1995), although after the parliamentary elections of February 1995 legislative changes were announced in order to make private land titling possible. The land distribution and privatization programme is now exclusively in the hands of the Ministry of Agriculture, with a National Land Fund that reserved 25 per cent of arable land for ethnic Kyrgyz farmers.¹⁴

The land reform programme has developed with substantial inconsistencies, but most

recently also with increasing dynamics. This can be shown by two quite contradictory observations. In a recent trip in Kyrgyzstan (June 1996), the present author visited a former collective farm around 70 kilometres north-east of the capital Bishkek, which combined dairy farming and crop production. Although the farm was recently reconstituted as a 'peasant association', in the interview with the farm manager it became clear that the land titling process had not induced the formation of viable family farms. Each adult member of the farm and even older some children had received usufruct rights for a fixed acreage of 0.85 hectare. On the question whether anybody had left the association, taking with her/him the allotted land, the answer was understandably negative, as there would be now way to survive with such a tiny plot. Overstaffing still remained a problem, but the continued employment was seen as providing a safety network for the agricultural workers (rather than 'peasants') and no reference was made to efficiency.¹⁵ On the other hand, it seems that during 1995 a strong boost occurred in family farm production. According to the Statistical Committee of the Kyrgyz Republic the total acreage of family farms in 1995 as compared to the previous year, increased from 10.1 to 23.1 percent of agricultural land (somewhat more than reflected in Table 4 above), while the share of these farms in the production of grain increased from 10.4 to 26.7 (!) percent. Household plots and private family farms together even represented respectively 91.0 and 80.4 percent of potatoes and vegetables output (StatKom KR, 1996:147-49).

In Kazakhstan, agrarian reform equally advanced with many ups and downs. Previously agricultural production had been dominated by more than 2,000 *sovkhoz* with an exceptional average size of 80,000 hectares and around 430 *kolkhozi* that were around 10,000 hectares large. Although initiated in the early 1990s the privatization process has only gradually progressed, with a renewed reform impetus given to it during 1994-95. Initially most 'privatization' meant the establishment of joint stock companies with only internal stock-holders (managers and workers), although also in Kazakhstan the amount of land available for private use by households within these enterprises substantially increased. It is interesting to see that similar contradictions and dynamics occurred as in Uzbekistan and Kyrgyzstan, although government policies have been quite diverse. In a sector study undertaken in 1994, the World Bank remarked that the 'large inefficient' *sovkhoz* were

simply transferred into 'large inefficient' collective or cooperative farms (World Bank, 1994a:39). Quite some of these enterprises still functioned under the same operative regime as before, albeit having changed its name. Werner (1994) notes that there was even a tendency after the first reform wave had passed (1992-1993) towards a position that is 'neo-collectivist', which could provoke obstacles to the formation of a viable private farm sector.

Table 4: Private Farms in Central Asian FSU States (1991-1995)

	1991	1992	1993	1994	1995
<i>Kazakhstan</i>					
Number	3,300	9,300	16,300	22,500	27,900
Average Size	238	533	406	348	376
Farm Area	800,000	4,900,000	6,500,000	7,800,000	10,500,000
Total Agricultural Land	271,646,000	..	..	..	..
Total Arable Land	35,497,000	..	..	..	..
<i>Kyrgyzstan</i>					
Number	4,100	8,600	12,800	17,300	19,600
Average Size	25	44	67	43	63
Farm Area	103,100	374,800	868,200	744,000	1,236,800
Total Agricultural Land	10,549,000	..	..	..	..
Total Arable Land	1,345,000	..	..	..	..
<i>Tajikistan</i>					
Number	4	4	100	200	..
Average Size	16	25	14	131	..
Farm Area	65	100	1,400	19,800	..
Total Agricultural Land	4,490,000	..	..	..	..
Total Arable Land	968,000	..	..	..	..
<i>Turkmenistan</i>					
Number	100	100	300	1,000	..
Average Size	10	10	8	8	..
Farm Area	1,100	1,100	2,800	5,900	..
Total Agricultural Land	42,500,000	..	..	..	..
Total Arable Land	1,351,000	..	..	..	..
<i>Uzbekistan</i>					
Number	1,900	5,900	7,500	14,200	17,700
Average Size	7	8	9	14	15
Farm Area	13,700	45,100	70,600	193,100	257,300
Total Agricultural Land	27,900,000	..	..	..	..
Total Arable Land	4,775,000	..	..	..	..

Note:

For comparative reasons it is useful to note that in Russia (1/1/1994) only 1.7 percent of agricultural land (or 5.4 percent of plowland) was in the private farm sector (not counting family plots and *dacha*-gardens). For the five CAS the share of agricultural land is within 0-10 percent, except for Kyrgyzstan, while shares of arable land (although the composition is unknown) would be substantially higher in the cases of Kazakhstan and Kyrgyzstan.

Sources: USDA (1993, 1995); Statkom SNG (1995, 1996);

This could be observed in a field visit in June 1996 to the Chengyldy farm, around 130 km north-east of Almaty, where a irrigation rehabilitation project of the World Bank was planned. It seemed that only some sub-contracting activities had been allowed, but basically the old structures of management of the collective (including the brigades) had been retained. Nevertheless, privatization of land in family farms has led to medium sized farms that can be economically viable (Table 4), while there are recent reports that in the north of Kazakhstan even entire collectives and former state farms have been acquired by private (mainly Kazakh) investors. These have retained there giant size, which may still conserve the previous problems of scale-inefficiency, in spite of changing ownership forms. Altogether, it is apparent that the demonopolization and privatization of at least some of the important state companies of agricultural services (procurement and inputs) have contributed to the current greater dynamics in the formation of private farms in Kazakhstan.

In conclusion, land reform has gone somewhat further in Kyrgyzstan and Kazakhstan, than in Uzbekistan, while largely being absent in Tajikistan and Turkmenistan. Nevertheless, a viable private farming sector is still far from firmly established. As is the case in Russia, only a relatively small percentage of agricultural land is owned or controlled by family farms. Where peasant farmers started to produce, they were often confronted with severe problems. This was because of the near total collapse of support services in the case of Kyrgyzstan, or because existing services are still geared exclusively to state and collective farms, such as in Uzbekistan. From this observation it follows that a push to rapid privatization and parcelization, within an environment of inefficient and sometimes non-existing markets, will jeopardize the viability of these peasant farms. It is the -now still insufficient- institutional change in agrarian markets would actually provide a real incentive to the formation of private farms. Nevertheless, one can already observe the emergence of a great variety of farm production arrangements, from farmer's associations to sub-contracted family production. However, in all CAS, the outcome of land and service sector privatization particularly depends on rural (and related urban) power relations, in which the vested interests of the former party elite play a decisive role. Related to this, the land reform that is currently been undertaken has a strong ethnic connotation, which partly explains the cautious approach of CAS-governments to this issue.

Finally, control over water, as well as land resources are an important issue. Water resources and their management are crucial for Uzbekistan's whole agricultural sector, and for Kyrgyzstan particularly in the populated Chui and Osh *oblasts*. The complexity of privatization of water rights and the introduction of water charges (at least on a cost recovery basis) -which some Central Asian governments are currently promoting- are nevertheless being underestimated in the economic reforms. A structural water reform, improving water management and emphasizing the scarcity of the resource, needs to be put high on the agenda. As 'land without water is no land' in the CAS, water reform should certainly not become a residue of land privatization. In particular in those countries where large-scale systems of irrigation exist, such as Uzbekistan and Turkmenistan (the main water users of the region), water reform is a highly complex and sensitive problem area in the process of agrarian transition (Lerman, et.al, 1996:167-70).

b) Reform of the State Order System

In the Soviet era all support services for agricultural production such as input distribution, agro-processing and trade, were closely linked to the 'state order system'.¹⁶ In Uzbekistan this is still largely intact, although in recent years its intervention in the output of agricultural commodities diminished to a small number of agricultural products (albeit dominant in the agricultural sector) such as cotton, grain, meat and milk. The procurement quota, or shares of the harvest that have to be sold by collective or other farmers to the state also gradually diminished since 1991. In 1993 this share was still 75 per cent for cotton. In 1995 it was reduced to 50 per cent, and further reductions are planned (Khan, 1996). The parastatal system still monopolizes most of the input markets, while the state still provides the farming sector with subsidies, including negative interest rates for bank credit due to high inflation.

However, Terms of Trade for agricultural producers on average did not improve, as a breakdown of trade relations and higher international prices for fertilizers and pesticides have substantially reduced their availability (and use), while prices paid by state companies for agricultural products are only a fraction of border prices.¹⁷ Even 'free market' prices for non-quota production are lower than international prices, mainly because export of cotton is still a quasi-state monopoly. With an exchange rate still lower than purchasing power parity

this is not surprising, but even with low input prices for agricultural producers there is a substantial net outflow of resources from agriculture, estimated in 1993 for Uzbekistan to be 0.9 billion dollar.¹⁸ However, during 1994-95 procurement prices have been substantially raised and a tendering system was introduced for the above-quota sales.

Cotton trade still remains largely under state control, but the grain trade became partly deregulated in 1995. Although such reforms were announced early 1994, and the complicated licensing system (which is open to corruption) came under attack since then, in practice it is still rather difficult for a private company to enter into export activities, in which often state companies remain dominant actors. Vested interests are likely to feel threatened by any form of trade liberalization. However, Uzbekistan is struggling to (re)establish trade relations with FSU countries as well as elsewhere in the world market, and is doing so quite successfully, nearly doubling its non-CIS exports in 1995 in comparison with the previous year (Stat Kom SNG, 1996:250). From an initial reaction of heavy protectionism common to all Central Asian States, licensing and import quotas are gradually being changed into a more rational trade tariff system, while export tariffs were recently reduced (Republic of Uzbekistan, 1994), and the Common Economic Space, formed in 1994 by Kazakhstan, Kyrgyzstan and Uzbekistan is starting to function in practice.

In Kyrgyzstan, during 1992 and 1993, output marketing was still state controlled. For commodities such as cotton, wool, wheat and tobacco, the state order system remained in force, paying prices far below international market levels to domestic producers. In early 1994, after the Emergency Programme was abandoned and a new wave of market reforms initiated, obligatory state procurement was abandoned and replaced by 'domestic supply agreements'. Prices were not yet freed, as several state monopolies, such as the Bread Products Enterprise and the huge Tamak-Ash agro-processing company, still remained and prices were being negotiated. Most minimum shares to be sold to the state were established at a level between 20-30 per cent of producer's output (except for tobacco for which this share was substantially higher). Similarly to Uzbekistan, there is sometimes a lack of real understanding by the leadership of how markets should work, particularly when a private farming sector has been formed (Duncan, 1994:86).

The state order system was geared to serve the state and collective farm system, and

has difficulties to adjust to the needs of the emerging private small farm sector. On the other hand, privatization of the huge parastatals is a complex matter, as most of them are formally bankrupt. The absence of outlets offering competitive prices, both for domestically traded food crops or for exportables, still leads to net transfers out of agriculture. Obviously this has negative consequences for agricultural production, particularly in the dairy sector. An example was the drastic reduction in milk production in 1993-94. As farmers saw the price of silage rising, they slaughtered their milk cows to concentrate on meat production. The disarticulation of the marketing system and reduced production was subsequently felt by the agro-processing sector. A milk factory 30 km from Bishkek (visited in early December 1994) with a daily capacity of 50 tons of raw milk, received only 5 tons. Lacking credit and transport facilities, it could not compete with the emerging street market in fresh milk in the outskirts of the capital.¹⁹ In terms of external trade Kyrgyzstan has liberalized much more than its neighbour Uzbekistan. Trade with Kazakhstan is lively, and many consumer products enter the country, although the cheap Kazakh and Chinese imports -that enter as a consequence of external trade liberalization- choke to death local Kyrgyz industries that produce with outdated technology at high costs.

Finally, in Kazakhstan the government had primarily taken a rather gradualist approach towards the privatization and deregulation of the marketing and agro-industrial processing sectors (1991-1993). This meant for example that the state order system for grain remained relatively untouched until 1994, when the state still bought under obligatory procurement arrangements around 4.1 million tons of grain (Liefert, 1995:14). Nevertheless since then procurement arrangements were somewhat relaxed (and eliminated for non-grain crops), while in 1995 a system of state procurement was introduced that was based on a competitive tender system. During 1994-95 in Kazakhstan the reform in this sector received a new push, as many state enterprises were transformed into joint-stock companies or privatized (in part through auctions). The government has also introduced extensive legislation to break-up the monopsony powers of many of these companies, in order to improve competition at the farmgate and promote a reduction of marketing costs for the main agricultural commodities. Nevertheless, agricultural markets are still fragmented, inefficient and in some cases state monopolies have simply been transformed into private monopolies.²⁰

In summary, the state order system is still largely in force in Uzbekistan, has been practically broken down in Kyrgyzstan, and is currently in a process of transformation in Kazakhstan. In all cases the newly emerging small private farmers face important obstacles as they operate in monopolistic, sometimes segmented, and often non-existing markets. Where transfers through the pricing system provided disincentives to producers (whether private or collective), the absence of accessible and competitive marketing channels and manufactured products that can be bought with income is also felt. The emergence of new support services (and the relevant institutions) for farmers is still slow, although there are private initiatives and government supported programmes that are trying to fill the gap left by the withdrawal of the state (or the disarticulation of 'old' institutions).

IV. CONCLUSIONS

In focusing on the process of privatization and market liberalization in the five Central Asian States during the last half-a-decade, the picture emerges that the outcome of reforms -taking into account the differences in initial conditions and political-economic context of the CAS- is not at all straightforward. The inter-republican division of labour of the former USSR defined strong links of dependency for the industrial sectors of the CAS, and the particularities of regional agricultural production patterns, such as the concentration on cotton in Uzbekistan, Turkmenistan and Tajikistan, on grain and extensive cattle raising in Kazakhstan, and on dairy production, mutton and wool in Kyrgyzstan. Although the dependency on a mono-crop such as cotton in the current context of the world market, and its negative impact on the environment, creates substantial problems to solve, it also supports the role of agriculture as a cushion for the overall contraction of the CAS economies. The shift in agricultural production towards more food staples and vegetable crops, in particular stimulated by changing demand patterns (away from meat consumption), government policies as well as increased small-scale household plot and *dacha*-garden production, seem to strengthen this development. It is not altogether clear whether the current emphasis on food self-sufficiency is coherent with the gradual opening up of these economies, because it seems to happen in situations that differ substantially in terms of 'reform performance', using the World Development Report (1996) terminology. Nevertheless, from a national perspective -

at least in the short term- it looks a rather consistent change of strategy.

In the analysis of the process of agrarian transition it was shown in this paper that land privatization -as is the case in Russia- has not progressed very far, at least in terms of the establishment of a substantial and viable private (family-run) farm sector. This is one of the reasons why the CAS do not score very high on the World Bank's 'Reform Progress Index'. Even in countries such as Kyrgyzstan and Kazakhstan, normally seen as the main reformers of the Central Asian region, there is still a predominant role for the heirs of the former *sovkhos* and *kolkhos* farms, having recently been transformed into joint-stock companies (often in the absence of a relevant stock market), peasant associations, or reconstituted production cooperatives. However, the progress of land privatization cannot be judged by only focusing on the number of private farms and the share of agricultural or arable land that they own or control in usufruct.

There are many other production arrangements, including family contract farm systems, which function within collectives or production cooperatives, or other forms of legal and illegal land tenure arrangements, that have emerged in various countries, including Uzbekistan, where -formally speaking- the land reform little progress was visible. The introduction of various forms of renting out of land to households will improve efficiency in the agricultural sectors of the CAS, where labour productivity has been the lowest of the FSU (Lerman, et.al, 1996:154). The expulsion of surplus labour is a feature that will improve the viability of the newly established farm units (albeit contributing to rural-urban migration and resulting problems). Depending on the creation of input and output markets and the access to them, these new farm units will be able to overcome the systematic inefficiencies that were inherent in the Soviet system of agricultural management.

The transformations that are taking place in the agricultural sectors of the CAS, in particular in Kazakhstan, Kyrgyzstan and Uzbekistan (and to a lesser extent in the other two) represent dynamic changes, are quite complex in nature and often highly differentiated per region, district or village community. The impact of privatization and market liberalization in the economies of the CAS and its relation to growth performance is at least problematic. If one analyzes agrarian reform, the pace and extent of privatization and market liberalization in the agricultural sector can hardly be positively correlated to economic recovery (and the

initial degree of contraction), in particular when one compares two 'extremes' on the 'Reform Progress Index': Uzbekistan and Kyrgyzstan. The complex relationship between the initial conditions and country-specific idiosyncrasies, the structural dependencies and the macro-development may provoke different (and often unintended) results. Institutional changes are crucial in the current agrarian transition, in particular those that promote the creation of a new market environment for the recently established variety of family-run farm units. They have to take into account the above observed grassroot developments in the agricultural sector, which differ per country (and often per region), and should receive priority attention from policy makers in the transitional economies of FSU Central Asia.

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NOTES

1. The authors (all attached to the World Bank) seem to represent a gradual shift in the Bank's position, as in World Bank (1993b) Uzbekistan was still seen as following a 'muddle through' scenario of reform (see Spoor, 1993).
2. The WB index is a weighted average of performance in economic liberalization (domestic market liberalization, external market opening, and entry of new firms). Although the authors of the World Development Report (World Bank, 1996) note that such an index is 'judgmental and necessarily approximate', it is used all the way through the report, and divides the 28 transition countries, including Vietnam and China, into four groups. Not surprisingly only Kyrgyzstan is in group 3, while the other four CAS are in the tail group 4.
3. Interestingly enough Uzbekistan would score high on the list of those transitional economies that have contained their contraction to a minimum. However, its reform profile does not coincide with the conclusion that 'stronger, more sustained liberalization spells a smaller output decline -and a stronger recovery' (World Bank, 1996:28). In this case it seems that the country has been conveniently eliminated in the graph that relates the 'rate of liberalization' with output contraction (*Ibid*:26). As a counter argument it should be noted that well into 1992 Uzbekistan received continued large-scale Soviet (and later Russian) budgetary support.
4. In the early 1990s only 12 percent of Uzbekistan cotton and 60 percent of silk cocoons are processed in the country (EIU, 1993, p.101).
5. Valuation of current output at world market prices gives an obvious advantage to those who produce high-valued raw materials and energy resources, which before had administrative (and mostly extreme low) prices. Previous StatKom SNG and World Bank data seem to indicate that in the 1991 the agricultural sector contribution was much higher than currently (which probably represents well the dominantly rural side of Central Asia). The variations in sectoral shares in GDP and NMP in recent years relate particularly to inconsistencies in methodology, abrupt changes in exchange rates, and severe problems of valuation, which are unfortunately left undiscussed in most CIS or western sources.
6. In terms of the use of water (*the* scarce resource) grain needs much less than cotton, but initial calculations point to negative net benefits (specially if water would be priced). Rice, on the contrary needs more water, and is expanded -such as in the delta of the Syr Darya river- because of increased demand and very high domestic prices.
7. In some cases it is the absence of private property rights that forms an obstacle for providing credit, as no collateral can be given.
8. In Uzbekistan the government has signed an agreement with the World Bank to undertake a comprehensive 'Farm Restructuring Study' that might be the first step towards de-collectivization and the formation of a private farm sector.
9. World Bank (1996). Nevertheless, the current reform movement in Uzbekistan is slowly seen as being more coherent and acceptable to the IFIs.
10. This aspect was brought forward by several participants from the CARs, during a World Bank/EDI Seminar in Washington, January 1996, dedicated to Rural Project and Investment Analysis. The particular session was led by Roy Southworth, Team Leader of a Number of CAS-Agricultural Sector Reviews done by the World Bank.

11. EIU (1993) mentions the 500.000 ha as well, but states that this was distributed in 1992! This seems unlikely in light of currently available data.
12. Interview with the Chairman of the Agricultural Economics Institute, October 1993 (currently changed to the Institute of Market Reforms), Tashkent.
13. In June 1990 ethnic tensions erupted in the city of Osh, with hundreds of people killed in only a couple of weeks. Only the sending of a Russian regiment somewhat defused the tension (Field notes, Osh, October 1993). The Osh *oblast* in the south-west of Kyrgyzstan forms part of the Fergana Valley and is inhabited by a majority of ethnic Uzbeks.
14. Until mid-1994 the land privatization was jointly governed by the State Property Fund and the Ministry of Agriculture. The land fund has formally been abolished by the end of 1995.
15. It has been estimated that with privatization and the establishment of private farms around 15-20 percent of labour is shed (Lerman, et.al, 1996:167).
16. 'The State order system regulated economic relations between collectives and state farms and the government. The government determines the output (*planned* output) of farms and the proportion of output (*quota* output) that they must sell to government enterprises (World Bank, 1993b:118).
17. It is somewhat difficult in this case to equalize 'border prices' with world market prices. Firstly, the quality of Uzbekistan cotton is relatively low. Secondly, most is still sold in the captive markets of the FSU, often in barter agreements.
18. The subsidies for agriculture are estimated at 0.7 billion dollars, the implicit taxation of agriculture at 1.6 billion dollar (World Bank, 1994b:50). This calculation was done by valuing input and output at border prices.
19. Field Notes from a visit to a milk factory, Chui valley, December 1994. It was striking that the factory was well equipped, with experienced staff and producing a good quality type of cheese. As it was still part of the collective farm structure, no independent decisions could be made and no working capital nor means of transport were available. The grim prospect for this factory seemed to be closure, with serious capital destruction. Strikingly enough cheese is now being imported from some EEC countries (partly because of the export restitution payments under the Common Agricultural Policy), although the population prefers local cheeses.
20. Remark made by Roy Southworth, World Bank in the above mentioned World Bank/EDI Seminar in Washington, January 1996.