

**AGRARIAN TRANSITION IN FORMER SOVIET CENTRAL ASIA:
A COMPARATIVE STUDY OF KAZAKHSTAN,
KYRGYZSTAN AND UZBEKISTAN**

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1. INTRODUCTION

This paper analyses the complex and rather diversified process of agrarian transformation that is taking place in the Former Soviet Union [FSU], focusing on the geographical area of Central Asia. It compares for three of the countries, namely Kazakhstan, Kyrgyzstan and Uzbekistan, the development of land privatisation and farm restructuring and the impact these had on the agricultural sector. This is done by imbedding the analysis into the macro-economic context of a profound economic crisis that occurred after the collapse of the Soviet Union, and the specific sectoral environment –in particular in relation to changing domestic markets and institutions- in which existing and new farm enterprises [including the emerging peasant farms] had to function.

Privatisation of land and other assets, and the restructuring of the previously dominant state farms (*sovkhozy*) and collective farms (*kolkhozy*) has been a focal point in many ‘transitional strategies’ of countries of Central and Eastern Europe and of the FSU (Czaki and Kislev, 1993; Mathijs and Swinnen, 1996; Wegren, 1998). Although reforms have shown a great diversity in form and implementation, there is broad acceptance about the reasons behind stagnation of agriculture during the final stages of the Soviet regime. Firstly, the very large state and collective farms –while having been formed to benefit from economics of scale- suffered from low productivity and were inefficient in the use of [particularly capital] resources. Technological innovation lagged behind, as well as crop yields and quality of production. Secondly, in the collective farms free-rider behavior was dominant, and income of members or workers as well as overall production had to be complemented by the produce of the household plots that had much higher land and labor productivity [partly by using subsidize inputs provided by the collective farm]. Thirdly, these farm enterprises were taxed through the state order system, which included obligatory procurement against low administered prices, providing disincentives to the farm enterprises and leading in most cases to a transfer out of agriculture, even if one takes the inflows of subsidized credit, public investment and services into account. Finally, the *sovkhozy* and *kolkhozy* in the CEE and FSU countries had, apart from being production units, important social functions, providing not only basic income and food to its members, but also social and health services in the rural areas, the latter being a complicating factor in the current farm restructuring process during the ‘transition’.

As stated above, post-1991 reforms in the agricultural sector of Central and Eastern Europe and the Former Soviet Union focused on privatization of assets, in particular land, and the transformation of the existing state and collective farms, leading to farm restructuring. It has been shown that the reforms in the CEE and FSU countries were quite diverse in content and implementation. In a study of nine countries in CEE Mathijs and Swinnen (1996) noted that privatization took place as distribution to workers or members, restitution to former owners, sales of assets [with a variety of conditions attached] and leasing arrangements. The farm restructuring led to new forms of association, namely co-operatives, joint stock companies, partnerships, associations of peasant farms, private farmers and peasants. Sometimes these were representing 'cosmetic changes' (ibid:14), in other cases they were more profound and really transformed the enterprises. In Russia also many differences can be observed (Brooks and Lerman, 1994; Wegren, 1998).

This comparative study of three Central Asian States [CAS], Kazakhstan, Kyrgyzstan and Uzbekistan, relatively under-researched and therefore less well-known in the literature on transition, will also point to diversity. These differences are not explained by simply pointing to a categorization of 'slow', 'gradual' or 'rapid' reform [such as is done in World Bank, 1996]. Of course, there are great differences in terms of sequencing and extent of reforms at the macro-level and *versus* the agrarian sector in these three countries, but there are equally unexpected and contradictory processes that take place (Spoor, 1995). Lerman, *et al.* (1996) note that a variety of 'land relations' and forms of 'farm organisation' 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 increasingly recognized.

Delehanty and Rasmussen (1995), analyzing Kyrgyzstan, 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 developed gradually, while other 'reformed sectors' such as joint stock companies, cooperatives and peasant associations still resemble some of the features of -largely inefficient- Soviet management practices. Finally, following the inverse order of cases, Kazakhstan has gone through a wide-scale process of farm restructuring, but most often without sufficient preparation, institutions and accompanying policies, which contributed to the currently existing profound crisis

of the sector. These are examples of the complexity of the reform process and its impact, which in this paper will be further explored by including [apart from sectoral and macro-data] several field reports that clarify the situation ‘ on the ground’ .

The paper is structured in the following way. In part two a brief analysis is presented of the macro-economic crisis that affected the CAS after 1991, which will provide the context of development of the agricultural sector [and *vice versa* influenced by it], taking into account resource endowments, differences in initial conditions [such as relative importance of the agricultural sector], and the impact of macro-economic contraction at sectoral level. Part three focuses on the two interrelated aspects of the agrarian transition, the processes of land privatization and farm restructuring that have taken place in the three CAS. The agricultural sector reforms in Kazakhstan, Kyrgyzstan and Uzbekistan are reviewed, showing comparative issues and substantial differences. In spite of slow privatization and the formation of only an incipient peasant farm sector, a wide variety of farm-types and production arrangements have appeared. In part four the demise of the state order system is discussed, with its consequences for the restructured farms, in view of mostly ‘missing markets’ . In the fifth part the impact of the aforementioned changes is analyzed, looking to trends in input intensity, land use, production and the share of public and private agents. 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 transformation 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 (sometimes family-run) farm units can operate. Institutional reforms and transformations in this respect have been quite insufficient.

1.1 The Central Asian Economies in Crisis (1990-97)

All FSU republics suffered from severe economic contraction in the past decade. The Central Asian States are no exception to this rule, as sustained negative growth can be observed in all of them during the first half of the 1990s (Table 1), sometimes even starting earlier (Spoor, 1997). 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 per-

cent; while finally in Uzbekistan, the largest economy in terms of population, GDP had decreased to 82 percent, being relatively the 'best' performing economy.¹

Table 1 GDP Development Central Asian FSU States (1990-1997)

	(%)1990	1991	1992	1993	1994	1995	1996	1997
<i>Kazakhstan</i>								
GDP Growth	-0.4	-13.0	-2.9	-9.2	-12.6	-8.2	0.5	2.0
Agriculture in GDP	28	29	30	16	15	21	12	11
<i>Kyrgyzstan</i>								
GDP Growth	3.2	-5.0	-19.0	-16.0	-20.0	-5.4	7.1	6.5
Agriculture in GDP	32	35	37	39	38	40	47	43
<i>Uzbekistan</i>								
GDP Growth	1.6	-0.5	-11.1	-2.3	-4.2	-0.9	1.6	2.4
Agriculture in GDP	33	37	35	31	38	32	26	29

Note: In Spoor (1997) slightly different figures have been presented, in particular for the first two countries. Some of the variation can be explained by the more recent re-estimates of GDP [instead of NMP = Net Material Product], other differences are left unexplained.

Sources: EBRD (1997,1998);

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 labor from Kazakhstan and Kyrgyzstan, the drought that hit the region in 1991, and the civil war that raged in Tajikistan, the economic situation by 1995 was without any doubt precarious. Nevertheless, by then the bottom-line of decline was reached and growth was restored in all three cases during 1996-97 [see Table 1].

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 an increasingly one-sided inter-republican division of labor, in which countries such as Uzbekistan, Turkmenistan and Tajikistan specialized in cotton, known as 'white gold'; Kyrgyzstan emerged as one of

¹Interestingly 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). Interesting is that Zettelmeyer (1998) takes the 'Uzbek growth puzzle' now much more seriously.

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 labor 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 (Spoor, 1998). Furthermore, most of the CAS (with the exception of Kazakhstan) imported more and more food, while also industrial [and to a lesser extent agricultural] 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. On the other hand, industry was established with a total disregard of comparative advantage by simply subsidizing transport costs between the center and the periphery.

Because of the structural dependency that grew between the center and the Soviet periphery such as the CAS, the disintegration of the Soviet Union had a dramatic impact on them. Previous inter-republican trade had 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 industry, while the primary sectors (agriculture and mining) were able to provide some cushion to the shock.

A large part of the population in the CAS is rural, such as in Uzbekistan and Kyrgyzstan where the share is around 60 percent. At the eve of independence, agricultural production represented an important share of GDP, with sub-sectors such as cotton (Uzbekistan, Turkmenistan and Tajikistan), wheat (Kazakhstan) and mutton and wool (Kyrgyzstan). Nevertheless, the share of industry in GDP was slightly larger, mainly because of extraction (and in some cases processing) of mineral resources, such

as gas (Uzbekistan), oil (Kazakhstan), coal (Kyrgyzstan), aluminum (Tajikistan, which is imported and then processed), tungsten, gold, and the production of thermal energy. A comparison of the currently available GDP data for 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. In particular because of the above noted inter-republican dependency relations of industry, and its initial incapacity to compete in foreign (non-CIS) markets, the contraction in this sector was dramatic (Spoor, 1997). In contrast, the agricultural sector was less affected during the first half of the 1990s, although grain production in Kazakhstan showed a strong negative trend, with large production declines and a diminishing share in GDP. In Kyrgyzstan this share has grown [as there has been a strong recovery of agricultural production since 1995], while in Uzbekistan it fluctuated with a gradual downward trend (Table 1).

There are several factors behind this sectoral behavior. Firstly, agricultural production such as cotton, grain, meat and wool formed part of nationally integrated production processes, 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.

1.2 Privatization of Land and Farm Restructuring

Privatization of land and other assets, in combination with the restructuring of the dominant sector of state and collective farms in the FSU was generally seen as crucial in reforming the agricultural sector (Mathijs and Swinnen, 1996). Certainly during the first half of the decade these reforms have 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 subsequent years, the process remained very slow and complex (Czaki and Lerman, 1996). In particular in Central Asia, state ownership of land been maintained, and distribution of land to workers of *sovkhozy* and members of *kolkhozy* was in most cases only in the form of usufruct rights [with wide differences between countries as regards to inheritance and tradability]. Furthermore, changes in farm enterprises-like the formation of joint-stock companies, farmer's cooperatives and forms of partnerships (*tovarishchestvo*)- often represented nominal rather than real changes (see Table 2). 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 missing rural input, output and credit markets.

In the CAS, land privatization has been a very gradual process, albeit with substantial country differences. Why is there 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 were a number of reasons. Firstly, there were initially 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. 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) gave 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 partly in Kazakhstan), forcing them to keep their structure and previous forms of operation intact. Peasant farms -sometimes physically 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, agricultural production heavily depends on existing large-scale irrigation systems. There is a fear, in particular in Uzbekistan, 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

want to avoid that a land privatization process leads 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 tensions 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 (Table 2), has recently emerged in response to popular demand for land (Craumer, 1995; Delehanty and Rasmussen, 1995; Spoor, 1995; Lerman *et.al*, 1996). In Kazakhstan, in particular after 1995, also large private farms [with life-long usufruct rights] have been formed, while in Kyrgyzstan, within the peasant farm sector there is a tendency to come to new forms of association (see also case study in Nookan, Djalal-Abad region).

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 'reformers' (Kyrgyzstan and to a lesser extent Kazakhstan) and is absent in the 'non-reformers' (Uzbekistan, Turkmenistan and even less Tajikistan). Actually, land reform has more than often taken the shape of nominal or cosmetic changes, where state farms transformed into joint-stock companies or cooperatives, collectives into limited liability partnerships or leasehold companies (Table 2). Such a change meant nothing more than taking away the old name plate above the main gate and hanging a new one there. 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 (Table 2), leading to an 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 491,000 hectare (around 12 percent of total arable land) was held by 2.5 million households 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). During 1993 nearly all *sovkhozy* 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 remained 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).

Table 2: Changing Agrarian Structures in Kazakhstan, Kyrgyzstan & Uzbekistan (1991-97)

	Kazakhstan	Kyrgyzstan	Uzbekistan		
State & Collective Farms					
<1991	In total 7,118 large state farms (Sovkhozy) and 492 collective farms (Kolkhozy) covered most of the land. This structure remains in force during first phase of reforms.	At the start of agrarian reform there were 179 kolkhozy and 263 sovkhoy which controlled most of the land.	Sovkhoz and Kolkhoz (more than 1,000) controlled the agricultural land (in 1990s 31 million ha) land is irrigated. Only by the end of 1993 these states change.		
1994	In 1995 still 1,405 sovkhoy, 359 kolkhozy, and 3,134 partnerships, joint stock companies, production co-ops.	By early 1993 an estimated 165 of these enterprises were (at least contractually) restructured. They remained in control of respectively 27% and 39% of agricultural land.	By 1994 all Sovkhoz/col were transformed by decree in co-operatives, joint stock companies, with leasing rights (100,000 ha based to inf. Members).		
1997	By the end of 1997, the state sector remained with specialized farms (20%), 1,164 partnerships, 578 joint stock companies and 3,754 production co-operatives.	After 1994-95 rapid change. By 1996 there were agricultural co-ops and collectives (23%), joint stock companies and farm liability farms (1%), state farms (2%) and others.	In 1997 more than 70% in hands of 1,540 collectives and similarly transformed agricultural enterprises (386 coops 62 peasant associations), and 750 'private' joint stock farms.		
Household Plots & Gardens					
<1991	On the sovkhoy and kolkhozy, 1.2 mln ha had orchards & garden plots. Of the urban population 1.9 mln had smaller gardens.	As in the other Soviet republics most members of the kolkhozy and sovkhoy had access to the long ownership of the plots.	Household plots and dacha gardens were important in Soviet period (0.22 ha/hh, 30% of agricultural products) 1988: 225,000 ha (1.9 mln ha), 1990: 220,000 ha (2.4 mln)		
1994	By 1994 the number of household and dacha plots had increased to 4.4 mln. (333,600 ha, or 0.08 ha/hh), this includes arable land and for other uses (dacha partment).	By early 1993 this average covered in total 135,000 ha. Since 1994 expansion of the hh plots in combination with increased productivity.	With various redistribution decrease: 1993: 481,000 ha (2.5 mln ha; 0.7 mln received for the first time)		
1997	By late 1996 the total sown (different from agricultural land) acreage of hh plots had grown from 222,300 ha to 262,300 ha.	While at the outset of reform (1990) hh plots in terms of the sown area covered 46,500 ha (3.6%), this was in 1995 already 115,500 (11.3%).	750,000 ha (18% of arable land) in hands of 3.0 mln households for 180 time identifiable use titles (Average size of hh plots is 0.2-0.25 ha)		
Peasant Farms					
	Nr. Farms Acreage (ha) Average % (1) % (2)*	Nr. Farms Acreage (ha) Average % (1) % (2)*	Nr. Farms Acreage (ha) Average % (1) % (2)*		
1991:	3,300 380,000 238 0.3 2.3	1991: 4,100 103,100 25 0.9 8.6	1991: 1,000 13,700 7 0.6 0.3		
1992:	9,300 4,900,000 533 1.8 7.1	1992: 6,600 376,800 44 3.4 31.2	1992: 5,000 45,100 8 0.2 1.4		
1993:	16,700 6,500,000 406 2.4 18.6	1993: 12,800 308,200 97 7.9 72.4	1993: 7,200 70,600 9 0.3 1.7		
1994:	22,500 7,900,000 308 2.9 22.3	1994: 17,500 744,600 43 6.9 62.9	1994: 14,200 105,100 14 0.7 4.6		
1995:	30,800 12,200,000 412 4.7 36.3	1995: 23,200 1,094,300 63 18.1 166.2	1995: 17,200 257,300 15 0.9 6.1		
1996:	42,500 20,000,000 452 7.4 57.1	1996: 31,800 1,494,700 48 13.6 126.6	1996: 16,100 265,000 15 1.0 6.3		
1997:	51,300 27,800,000 542 10.3 79.4	1997: 38,700 2,512,200 25 8.6 79.3	1997: 19,800 308,200 16 1.1 7.3		
*Notes: Both Comparisons are only indicative			*Notes: Both Comparisons are only indicative		
(1) Agric.Land: 270 mln ha; (2) Arable Land: 33 mln ha			(1) Agric.Land: 17 mln ha; (2) Arable Land: 1.2 mln ha		
(1) Agric.Land: 270 mln ha; (2) Arable Land: 33 mln ha			(1) Agric.Land: 38 million; (2) Arable Land: 4.2 mln ha		

Sources: Sarofim KR (1996); SCSA (1997, 1998); World Bank (1993b, 1994, 1995a,b); Bloch & Rasmussen (1993); Lemmen (1996); IMF (1998a) and ILL (1998, 1999).

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 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 (Uzbekistan), 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 *no-menklatura*.

By 1997 it was estimated that there were nearly 20,000 *daikhan* or peasant farms, with an average landholding of 16 ha (Table 2). Even with the recent government decisions on land distribution, land ownership is still a monopoly of the state, while peasant farmers can only have leasing (or usufruct) rights. 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 their inputs come from the former *kolkhozy*. According to EIU (1998:21) farmers still are selling at below-market prices to state procurement agencies, and ‘local officials keep meddling in private farmer’s affairs’.

In Kyrgyzstan land reform -although definitely having progressed further than in Uzbekistan- is also not without contradictions. With a recent history of violent conflicts between Kyrgyz and Uzbek people in the *oblast* of Osh², 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.

²In 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.

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.³

Fieldvisit to Keminskaya Raion, north-east Kyrgyzstan

According to the Head of the Land Resource Management Department of the Rayon Administration, Moris Alinbekov, after various waves of reforms in Kemin, there are [in late 1997] in total 4,905 individual farmer's families, and furthermore around 617 peasant associations. Also there are 61 mini-dairy farms (of between 8-50 cows), 7 co-operatives (of which 5 are joint-stock companies and 2 collective farms). Five technical service stations (cooperative) provide services to the farmers and peasant associations, who have to pay for these services. According to Alinbekov, the psychology of the producers has definitely changed. Now they have become interested in farming. The first reforms started in 1990, and first experiments with 'private' farms started in Kzyl Su (Kemin). By 1994 many people wanted land, and the government decreed that 25 percent of land should be reserved (land fund), while the other 75 percent could be distributed. Who had already received land in the early stages was again affected in the second wave of reform. All workers and their family members (born before the decree) received between 0.4 - 1.0 ha of land, depending on the local availability of land (in the village). The quality of land only counted for the establishment of the rate of land tax. At first peasant associations and cooperative farms were established in 1994, but now the people want to separate themselves and become individual farmers. The agricultural marketing channels in the Keminskaya raion present still very difficult problems. The government does not give any credit to buy fertilizers. Practically there are no fertilizers supplied on credit. As there is nearly no private trade channel for fertilizers (imported), little is used and hardly any pesticides as well. Phosphorus and Potash are not applied, so the land is becoming very poor. Before, Kemin used about 22,000 tons of fertilizers/year. In 1996 this was only 900 tons, and in 1997 the regional administration only got 120 tons of Nitrogen fertilizer on credit from the state. Last year the price of wheat was high. Around 30 percent of the land was sown with wheat, and this year the acreage increased. However, there is an imbalance between the prices of wheat and of gasoline and gas. Peasants often need rapidly the money to pay their debts, and therefore make small profits only. There is dynamics of production in the agricultural sector, according to Alinbekov, but with small farms of between 3-5 ha, no crop rotation is possible, and the future is difficult for them. First these peasants separated from the previous farm enterprises, now they should cooperate again with each other. For a rational use of land, minimally around 50 ha would be needed. When next year the market in 'usufruct rights' will start to function, this may lead to further land concentration. There is growth in production, because there of a more efficient use of land. In animal husbandry the situation is different. In Kemin we used to have 310,000 heads of sheep (1990), now there are not more than 29,000. This is caused by the low prices for meat and wool and the very high costs of inputs. Therefore it was not profitable any more. Maybe some growth is to come, because the price of meat increased. Sheep were basically held for their wool, but there is no market for wool. When this is (re)established and prices rise there will be an increase in the number of heads. Finally, when asked for the social situation (in comparison) with previous times, Alinbekov answered with a deep sigh (*kak skazat*, or what shall I say about it). Some farmers have become rich, but on the whole the living standards decreased.

FIELDNOTES KYRGYZSTAN, SEPTEMBER 1997

³Until 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.

From Table 2 it can be noted that in Kyrgyzstan there was a rapid growth in the number of private peasant farms in the period 1994-95, reaching 23,200 in the latter years, covering 1,994,300 ha. This was already 18.1 percent of the total agricultural area, but –just to put it into perspective- more than the arable land area. According to official data the number of farms have increase to 38,700 in 1997, but with a substantially lower acreage. This might be explained that the reduction is actually included in an large another category, the associations of peasant farms.⁴

Fieldvisit to Nooken Raion, Djalal-Abad Region, Fergana Valley

In Nooken *raion* we were received by Omarzak Barakanov, a very nice and well-educated (Moscow Timiryasev graduate), and happy to lead us around. Nooken has 8 rural village administrations, and the total amount of land is 23,000 ha (of which 18,000 ha is irrigated). The raion is actually crossed by the road Djalal-Abad to the north, which is good for their communication. The *raion* is divided into agro-climatical zones, and he took me to the zone no.3, where cotton, grains, tobacco were cultivated. Quite nice brick stoned houses, with heating, were along the roadside, showing that this sub-*raion* was doing reasonably well. Through the village of Shaidan, where the former Leninjol *kolkhoz* was, we went to a peasant association (PA) 'Darga' [which is the name of a clan or extended family to which most or maybe all members belong], led by Kapar Kurbanov, who came shortly after, a well to do farmer entrepreneur. They have 100 ha, with 20 ha cotton, 50 wheat and other crops. They practice crop rotation, not using alfalfa ['for what we need that?'], but feedgrains, such as corn. They also started to produce cotton under Chinese technology (where separate plants are under plastic, with small irrigation around each plant), which will increase the yield from 25 centners to 45 centners/ha. Last year they had even 68 centners/ha for wheat. They just bought elite seeds in Bishkek, two days ago Kapar brought them over the same long and dusty road as we came. He will try to reproduce the elite seeds and sell to other farmers. It seems that this PA is a success story. They started in 1991, and were the first. They have learned how to fly very early, and can now stand on their own. They have 100 ha with only 18 families (all relatives). There are quite some people who would like to join, but as they have already accumulated a substantial capital (tractor, combine for wheat harvesting, compressor, a newly build storage and administration building, bus, etc), they will make a separate charter for new members who only bring in land. If somebody goes out, the person can only take his/her land, but not claim any share on other assets. They have the cotton field practically divided amongst the families with all small plots, depending on the family size. With the wheat harvest each family member gets 250 kg of wheat (which can therefore go up to 2,500 kg for a family of 10 members). Apart from the crops each family has on average 2 cows, 1 horse, 10 sheep, and earns per year 15,000 soms, with also still 60-70 liters of cotton seed oil. One can see that this PA is quite rich.

The leader stated that they feel very lucky to have started so early. Now the mentality has changed. Nobody is controlling them any more. Each family works for itself. He still registers the buying of seeds at the village administration, with the promise that he will sell seeds next year to other farmers. The area of land per family is enough for them, but two people are enough to work it. It means that children normally go to school. According to him new schools were actually built, and they pay taxes (on the rented 'land fund' lands, and normal taxes), from which these facilities that previously were provided by the *kolkhoz*, are financed. Nobody has left the PA yet, but there is a charter that regulates departure of an original member, who than can claim a share of the capital assets, to be paid in cash.

FIELDNOTES KYRGYZSTAN/UZBEKISTAN. SEPTEMBER 1997

⁴ Bloch and Rasmussen (1998) provide detailed data on the emerging farm structure in early 1996. They mention 215 associations of peasant farms, with 3,423,000 ha and 38,404 peasant [single family] farms, with 1,714,000 ha. The difference with other [also official] data in Table 2 is left unexplained.

The case-studies, both in Chui valley, as well as in the southern regions of Djalal-Abad and Osh, indicated that substantial changes have taken place, and although the previous collective farms are still important, reformed enterprises, peasant farms and the household plot agriculture have become dominant in the sector. The two field reports also indicate substantial problems for private producers, with in some cases success (such as in the peasant association in Nookan, Djalal-Abad).

In Kazakhstan, agrarian reform equally advanced with many ups and downs. Previously agricultural production had been dominated by more than 2,000 *sovkhozy* with an exceptional average size of 80,000 hectares and around 400 *kolkhozy* that were on average 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' *sovkhozy* 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. This tendency was also noticeable during a recent research visit to the South-western rural areas of Djambul and Shymkent in Kazakhstan [See inserted field report]. In interviews with officials responsible for agriculture, 'planning', 'procurement' and 'control' were still the keywords of agricultural policy [Fieldnotes Kazakhstan, September 1997].

In Table 2 it can be noted that since 1995 (and in particular since begin 1997) the number of individual farms [mostly with life-long usufruct rights] has increased rapidly, with an increasing average size, growing from 30,800 farms (covering 12,7 million ha) in 1995, to 51,300 farms (with 27,8 million ha) in 1997. With an average size of 542 ha/farm it is difficult to call them 'peasant farms', although in the specific case of Kazakhstan farms are generally much larger than in the other countries, because

of the inclusion of extensive animal husbandry. These farms represent a share of just more than 10 percent of the total agricultural area, but in comparison with arable land much more (see Table 2).

Field visit to rural area close to Djambul, South-West Kazakhstan

The *sovkhos* of the village Rovnoe near Djambul originally had 1630 workers, of which a number of them took their land shares away (200 workers with 800 ha). Finally only 400 workers, with 3,500 ha established a new co-operative, inheriting all the equipment (such as combines and tractors), but also the financial debts of the former *sovkhos*. There is 1,500 ha of grain, 500 ha of this is maize, 150 ha onions, 50 ha potatoes, 30 ha vegetables and 25 ha sugar beets. Around 1000 ha is covered with alfalfa and fodder grasses. They have around 1000 cows, with 500 are milk cows (250 in production), 200 horses, and 4000 m² of green houses for vegetables. They enthusiastically spoke about Dutch seed potatoes (as it had been suggested that my visit could lead to investment in this enterprise!) and a project with Israeli technology of sprinkler irrigation and Dutch equipment, through which the yield improved from 14 centners/ha to 35 centners/ha.

At the end of our conversation, that took place in the traditional setting of the large old central building of the *sovkhos* and an office of which there are thousands of others standard in the NIS countries, it was confessed that this had only functioned for one year because they could not buy new seed potatoes [which says something about the cash flow]. Contracts are made with the 400 workers, who are now 'members' of the cooperative, and payments are done in the form of 'dividend', which is 20 percent of the profit. The manager Kaliev Barbol was very definite in preserving as much as possible the current assets of the co-operative, such as the machine park [which was not in a very good state, but at least still there, while in many other cases already sold before the 'privatization' took place, or divided amongst the director and deputy director, as Barbol said to me later]. Although they currently produce milk at a loss, they want to keep the cows, in order to be able to make profits when the market will offer better prices.

Their problems are many. The gas from Uzbekistan has become very expensive and they estimated that currently 75-80 percent of the costs of vegetables are energy costs! The former *sovkhos* produced in 1991-92 around 10-12 tons of milk per day, now they have around 1.2 tons of about 250 milk cows (6 liters on average). According to the manager they have no money, no salary [this is often confused with the term dividend] to pay to the workers, no pensions to pay, and large financial debts (old and new ones). They cannot get credit (interest rates are estimated at 35 percent) for working capital or investment because of non-solvency. In the past two years almost 50 percent of the profits came from vegetables, because in the greenhouses two harvests were possible, now with the energy supply problems this is difficult.

The following visit to the green house complex was really one of hallucination. Received by a drunk operator, we visited the terrain, where the first block of greenhouses had been destroyed some years ago by an earthquake (but never dismantled) and the other block completely damaged and rusting away, as they were not used since nine months when energy supplies stopped. This picture is completed by an old energy plant, only guarded by a young Russian woman, living in very poor conditions, and a processing plant that seemed completely deserted as well. Indeed, all assets were still there, but understandably foreign investors, after visiting this former *sovkhos*, backed away, as the replacement investments would be enormous. In the end, it would probably be better to concentrate on wheat, meat, potato and possibly milk production, with summer production of vegetables, and forget about the rest. In any case, it was quite a depressive visit.

FIELDNOTES KAZAKHSTAN, SEPTEMBER 1997

1.3 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.⁵ In Uzbekistan this is still partially intact, with 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 were introduced in recent years (Khan, 1996), up to 35 percent. The parastatal system still monopolizes most of the input markets, while the state provides the farming sector with subsidies, including negative interest rates for bank credit due to high inflation. Therefore state influence and control on agricultural markets in Uzbekistan is quite sizeable.

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 were initially only a fraction of border prices.⁶ 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 1995 for Uzbekistan to be between 0.9-1.2 billion dollar (IMF, 1998a:53). However, since then the procurement prices have been substantially raised and a tendering system was introduced for the above-quota sales. In following two years the transfer out of agriculture dropped to levels between 250-550 million USD.⁷

Cotton trade still remains largely under state control, but the grain trade became gradually deregulated in 1995. Although such reforms were announced early 1994, and

⁵The 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 (*quota*) output that they must sell to the government (World Bank, 1993b:118).

⁶It 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.

⁷ At the official auction rate it is even below 100 million USD. IMF is using hypothetical commercial rates for its estimates.

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.

In Kyrgyzstan, in the initial years of reform, 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 was 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 had difficulties to adjust to the needs of the emerging private small farm sector. On the other hand, privatization of the huge parastatals [as executed in Kazakhstan and Kyrgyzstan] was a complex matter, as most of them were 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 (Fieldnotes Chui valley, 1994).

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 farm gate 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.

In summary, the state order system is still largely in force in Uzbekistan, has been practically broken down in Kyrgyzstan, and is an advanced process of transformation in Kazakhstan. In all cases the newly emerging small private farmers and reformed agricultural enterprises 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 [and donor] supported programs that are trying to fill the gap left by the withdrawal of the state (or the disarticulation of old institutions), such as the rural finance program, which is coordinated by the new Kyrgyz Agricultural Finance Corporation (KAFC).

1.4 Impact of Crisis and Reforms

The development of the agricultural sector in Kazakhstan, Kyrgyzstan and Uzbekistan, measured with indicators such as agricultural GDP, or the output of major commodities [see Table 3], has been influenced by the macro-economic crisis in the

first half of the 1990s, the disintegration at national and sectoral level caused by the collapse of the Soviet system, and last but not least, by the reforms themselves.

Production has also been negatively influenced by strongly reduced use of chemical inputs, while this had been in some cases at quite high levels. According to the FAO Kazakhstan consumed 475,000 tons of fertilizers [in particular phosphate] in 1992, while in 1995 this has dropped to 95,000 tons. This was due to disintegrating supply mechanisms, increased prices and dropping demand. There was a modest recovery to 124,000 tons in 1996.⁸ In Uzbekistan the decrease was less, from 730,000 tons in 1992 to 474,000 tons in 1995, increasing again to 530,000 tons in 1996. In Kyrgyzstan, where there was already a low use of chemical fertilizers, there was also a substantial drop (see notes on the Kemin field visit).

In Table 3 output of grain, cotton, potatoes and meat is compared for the period 1990-98. From these data the following trends can be noted. Firstly, in Kazakhstan, since 1992 a strong declining trend emerged in grain production. From a level of nearly 30 million tons in 1990 and 1992, the average for 1995-97 dropped to just above 10 million tons, with an even lower level in 1998, the latter caused by the extreme drought that struck many parts of the FSU. This contraction can also be seen in cotton, potatoes and meat. The important livestock sector has suffered for various reasons. The dramatic drop in income of the population has contracted demand for meat, while also the formerly capital intensive production of meat has partly collapsed. The official data on slaughtered weight could underestimate overall output, as a substantial part of animal husbandry is now undertaken by individual farmers or on household plots, whose production is much more difficult to record. According to IMF (1998b:32), meat production in 1993 was coming for 49.0 percent from private production, in 1997 this was already 75.4 percent. For potatoes this was respectively 74.0 and 98.8 percent.

In Kyrgyzstan also a drop in output in the major agricultural commodities in the first half of the 1990s can be noted (Table 3). This negative trend stopped since 1995, with a strong boost occurred in family farm production. 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 (see also Table 2), while the share of these farms in the production of grain increased from 10.4 to 26.7 (!) percent. Household plots and private

⁸ FAOSTAT Database, internet site www.fao.org

family farms together even represented respectively 91.0 and 80.4 percent of potatoes and vegetables output (StatKom KR, 1996:147-49).

Table 3: Output Main Agricultural Products FSU Central Asia (1990-1998)

(x 1,000 t.)	1990	1991	1992	1993	1994	1995	1996	1997	1998
<i>Grain (cleanweight)</i>									
Kazakhstan	28,488	11,992	29,772	21,631	16,454	9,505	11,237	12,238	7,370
Kyrgyzstan	1,503	1,374	1,516	1,508	996 ^a	998	1,424	1,734	1,690
Uzbekistan	1,899	1,908	2,257	2,142	2,467	3,162	3,549	3,788	3,742
<i>Cotton</i>									
Kazakhstan	324	291	252	200	206	180	183	206	162
Kyrgyzstan	81	63	52	42	54	75	73	62	75
Uzbekistan	5,058	4,646	4,128	4,234	3,938	3,934	3,350	3,641	3,220
<i>Potatoes</i>									
Kazakhstan	2,324	2,143	2,570	2,296	1,953	1,720	1,656	1,472	1,623
Kyrgyzstan	365	325	362	308	310	431	562	678	724
Uzbekistan	336	351	365	473	567	440	490	686	884
<i>Meat (Slaughtered weight)</i>									
Kazakhstan	....	...	1,256	1312	1207	985	855	718	646
Kyrgyzstan	...	...	228	214	197	180	186	186	189
Uzbekistan	...	...	469	517	509	509	461	491	529

Sources: EIU (1995; 1999); World Bank (1994c); Spoor (1995); StatKom SNG (1996, 1998); FAOSTAT-Website.

Note: ^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.

The latter sector is also the fastest growing sub-sector. However, this also shows that the construction of a viable peasant farming sector still encounters difficulties. Agricultural production has shown quite a recovery in the past years, although it seems that major bottlenecks have appeared in terms of marketing, processing and finance, which at the moment are containing the growth spurt (see also IMF, 1998c:35).

In Uzbekistan there is a clear shift away from the overall dependency of cotton, towards situation of food self-sufficiency. This has meant that cotton output has reduced from 5 million tons in 1990 to just over 3 million tons in 1998, while grain production has doubled in the same period. As these strategic commodities are still largely produced in (only nominally transformed) collectives, this shift in land use reflect a political decision to produce more food (comparable with the grain sector in Kyrgyzstan, which remains dominated by collectives and co-operatives). Uzbekistan has been able to contain the crisis in the agricultural sector, and in grain, potatoes and

meat there is growth, with only some fluctuations. The contribution of the important household plot (and leasehold) sectors is more difficult to measure in Uzbekistan, but according to data obtained from the Ministry of Macro-economy and Statistics in Tashkent, these were producing in 1996 around 25 percent of the net material product (with most likely much higher percentages in potatoes, vegetables and meat).

CONCLUSIONS

From the analysis of the process of land privatisation and farm restructuring in three of the Central Asia states, Kazakhstan, Kyrgyzstan and Uzbekistan the following main conclusions can be drawn. Firstly, although in all three cases state ownership of land has been retained, there are various forms of providing usufruct rights to individual farmers. These range from limited leasing rights that are dominant in Uzbekistan, to inheritable life-long rights to use the land in Kazakhstan and Kyrgyzstan. The issue of full private ownership is still heavily debated in the CAS, unlikely to be implemented in Uzbekistan, but gradually to be introduced in the other two countries. As was shown in this paper, the formation of peasant farms [or individually operated farms] is still limited, but if one takes into account the expansion of the already existing area [and access to] household plots, *dacha* gardens and orchards, and the renting out [leasing] of land within the still existing collective farm structures, the overall influence of private farming has substantially increased, in particular during the second half of the 1990s. It can therefore be concluded that in spite of a still incipient private farming sector – measured in the number and acreage of individual farms- the contribution of private farming to the overall product has become much more important [with still substantial differences].

Secondly, it was shown that farm restructuring had been largely cosmetic in the three countries during the first half of the decade. Thereafter, Kyrgyzstan and Kazakhstan implemented much more reforms, which led to a variety of new agricultural enterprises, including joint-stock companies, partnerships, co-operatives and peasant associations, with many production and marketing arrangements between the members. In Uzbekistan, although the same type of farm restructuring has been carried through, much of the changes have been more nominal than real, although interestingly combined with –again a great variety- of leasing and contract arrangements with households or groups of producers. In all three countries, with Uzbekistan much more and Kyrgyzstan, on the other end, much less, the heirs of the previous *sovkhozy* and *kolk-*

hozy form still a dominant factor in the sector. In spite of large differences in ‘reform performance’ [World Bank, 1996], it is striking to see this similarity. A substantial difference can be found in the influence of the state on the agricultural producers [enterprises, individual farms and households]. In Kazakhstan one notices an enormous vacuum in this field, where many of the ‘privatised’ farms have been left on their own, and institutional support and accompanying agricultural policies are lacking. In Kyrgyzstan, this was the situation in the mid-1990s, while more recently one can observe new initiatives to stimulate the formation or construction of credit, input and commodity markets, essential to overcome the very serious bottlenecks that the agricultural sector has encountered. In Uzbekistan, the state influence is still very large, which means amongst others that while official procurement quota for cotton and grain have diminished- the ‘free market’ is still heavily controlled by the state.

Thirdly, the agricultural sectors in the three countries have suffered contraction, although less than the economies at large. In Kazakhstan there is currently a severe crisis in the agricultural sector, which seemed to have been the stepchild in the transformational strategy [which focused on the development of the abundant mineral resources]. In this case missing markets and weak institutions are the environment in which private farming and restructured enterprises have to operate. In Kyrgyzstan, during 1995-97 a rapid recovery took place in agricultural production, in particular caused by private farming [peasant farms and household plots], followed by more moderate growth. Finally, in Uzbekistan, a slow recovery can be observed, combined with a –state induced- shift from cotton towards grain production. In all three countries the consumption of chemical fertilisers reduced substantially, under the influence of increased prices, and overall economic and sectoral contraction.

Taken into account the differences and similarities, the overall picture is rather complex. It cannot be concluded that swift land reform and farm restructuring, when implemented, has led to a subsequent recovery, as in those cases there was a great lack of institutional change, formation of markets and accompanying agricultural policies to support and stimulate the newly formed enterprises and peasant farm sector. In countries in which the agricultural sectors are of such great importance, a decade of transition has brought only limited progress.

This is to be explained from: (i) the initial naïve expectations that market reforms would swiftly bring recovery, underestimating the complexity of bringing structural changes to the sector in these countries; (ii) a conservative –clinging to power and

control- attitude of governments and rural élites [such as in Uzbekistan, but also visible in the other two countries; (iii) a much less apparent tradition of individual farming in these countries, as exists in some other countries of the CEE and FSU; (iv) a disarticulation of financial, transport and marketing systems, and insufficient build-up of alternative and functioning new ones, in the cases where reforms were substantial; and (v) resistance amongst the farming population, although with substantial differences, to become independent producers in light of all these uncertainties and sometimes even straightforward obstacles to operate as such.

REFERENCES

- Bloch, Peter C. and Kathryn Rasmussen. 1998. 'Land Reform in Kyrgyzstan', in: Stephen K. Wegren, *Land Reform in the Former Soviet Union Eastern Europe*, Routledge, London and New York, pp. 111-35.
- Brooks, Karen & Zvi Lerman. 1994. *Land Reform and Farm Restructuring in Russia*, World Bank Discussion Paper, nr. 233, Washington.
- Craumer, Peter. 1995. *Rural and Agricultural Development in Uzbekistan*, The Royal Institute of International Affairs, London.
- Czaki, Csaba and Zvi Lerman, 'Land Reform and Farm Restructuring in the Former Socialist Countries in Europe', *European Review of Agricultural Economics*, Vol. 21 (3-4), pp. 555-78.
- Czaki, Csaba and Zvi Lerman, 1996. 'Agricultural Transition Revisited. Issues of Land Reforms and Farm Restructuring in East Central Europe and the Former USSR', Plenary Papers VIIIth EAAE Conference, 'Redefining the Roles for European Agriculture', Edinburgh, pp.61-96.
- Delehanty, James and Kathryn Rasmussen. 1995. 'Land Reform and Farm Restructuring in the Kyrgyz Republic', *Post-Soviet Geography*, Vol. 36 (9), pp.565-86.
- Duncan, Alex. 1994. 'Report: Agricultural and economic reform issues in Kyrgyzstan, former Soviet Central Asia', *Food Policy*, Vol.19 (1), pp. 85-87.
- EBRD, 1997, *Transition Report 1997*, European Bank for Reconstruction and Development, London.
- EBRD, 1998, *Transition Report 1998*, European Bank for Reconstruction and Development, London

- EIU. 1995. *Country Report: Central Asian Republics: Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, Uzbekistan*, Economist Intelligence Unit, 1st Quarter, London.
- EIU. 1998. *Business operations report: Central Asia*, Economist Intelligence Unit, 4th Quarter, London.
- EIU. 1999. *Country Report: Kazakhstan*, 1e Quarter 1999, London.
- IMF. 1998a 'Republic of Uzbekistan: Recent Economic Developments', IMF Staff Country Report No.98/116, October, Washington.
- IMF. 1998b. 'Republic of Kazakhstan – Recent Economic Developments', IMF Staff Country Reports No.98/84, Washington.
- IMF. 1998c. 'Kyrgyz Republic: Recent Economic Developments', IMF Staff Country Report No.98/8, Washington.
- Khan, Azizur R. 1996. 'The Transition to a Market Economy in Agriculture', in: *Social Policy and Economic Transformation in Uzbekistan*, ILO, Geneva, pp. 65-92.
- Lerman, Zvi, Yevgeniy Tankhilevich, Kirill Mozhin, and Natalya Sapova. 1994. 'Self-Sustainability of Subsidiary Household Plots: Lessons for Privatization of Agriculture in Former Socialist Countries', *Post-Soviet Geography*, Vol.35 (9), pp.526-42.
- Lerman, Zvi, Jorge Garcia-Garcia and Dennis Wichelns. 1996, 'Land and Water Policies in Uzbekistan', *Post-Soviet Geography and Economics*, Vol. 37 (3), pp.145-74.
- Lerman, Zvi. 1998. 'Land reform in Uzbekistan', in: Wegren, Stephen K. (Ed.) *Land Reform in the Former Soviet Union and Eastern Europe*, Routledge, London and New York, pp. 136-61.
- Liefert, William M. 1995. 'Grain Sector Reform and Food Security in the Countries of the former USSR', Paper presented at Policy Workshop in Kiev, Ukraine, 6-8 December.
- Mathijs, Eric and Jo Swinnen. 1996. 'Agricultural Privatization and De-collectivization in Central and Eastern Europe', *Transition*, 26 July, pp.13-16.
- Republic of Uzbekistan. 1994. *Decrees and Resolutions: On Measures for Intensification of Economic Reforms, Protection of Private Property and Promotion of Entrepreneurship*, Uzbekistan Publishing House, Tashkent.
- Spoor, Max. 1993. 'Transition to Market Economies in Former Soviet Central Asia: Dependency, Cotton and Water', *The European Journal of Development Research*, Vol.5 (2), pp.142-58.

- Spoor, Max. 1995. 'Agrarian Transition in Former Soviet Central Asia: A Comparative Study of Uzbekistan and Kyrgyzstan', *The Journal of Peasant Studies*, Vol.23 (1), pp.46-63.
- Spoor, Max. 1997. 'Upheaval along the Silk Route: The Dynamics of Economic Transition in FSU Central Asia', *Journal of International Development*, Vol 9 (4), 579-88.
- Spoor, Max. 1998. 'The Aral Sea Basin Crisis: Transition and Environment in Former Soviet Central Asia', *Development and Change*, Vol.29 (3), pp.409-35.
- Zettelmeyer, Jeromin. 1998. 'The Uzbek Growth Puzzle', *IMF Working Paper* No.98/133, Washington.
- Stat Kom KR. 1996. *Kyrgyzstan v Tsifrakh 1995* (Kyrgyzstan in Figures 1995), National Statistical Committee of the Republic of Kyrgyzstan, Bishkek.
- StatKom SNG. 1997. *Sodruzhestvo Nezavisimyykh Gosudarstv v 1996 Godu* (The CIS in 1996), CIS Statistical Committee, January, Moscow.
- StatKom SNG. 1998. *Sodruzhestvo Nezavisimyykh Gosudarstv v 1997 Godu* (The CIS in 1997), CIS Statistical Committee, January, Moscow.
- SCSA. 1997. *Selskoe Khozyaistvo Respubliki Kazakhstan*, State Committee for Statistics and Analysis, Almaty.
- SCSA. 1998. *Statistical Bulletin*, No.1, State Committee on Statistics and Analysis, Almaty.
- Wegren, Stephen K. (Ed.) 1998. *Land Reform in the Former Soviet Union and Eastern Europe*, Routledge, London and New York.
- Werner, Cynthia A. 1994. 'A preliminary assessment of attitudes toward the privatization of agriculture in contemporary Kazakhstan', *Central Asian Survey*, Vol 13 (2), pp.295-303.
- World Bank. 1993a. *Kazakhstan: The Transition to a Market Economy*, World Bank, Washington.
- World Bank. 1993b. *Uzbekistan: An Agenda for Reform*, Washington.
- World Bank. 1994. *Kazakhstan, Agricultural Sector Review*, December, Washington.
- World Bank. 1995a. *The Kyrgyz Republic Agricultural Review*, Report No.12898-KG, World Bank, Washington, 2 Vols.
- World Bank. 1995b. *Republic of Uzbekistan: Selected Issues in Agriculture*, Mimeo World Bank, Washington.

World Bank. 1996. *World Development Report: From Plan to Market*, Oxford University Press, published for the World Bank, Washington.