

# Agricultural Restructuring and Trends in Rural Inequalities in Central Asia

*A Socio-Statistical Survey*

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## Acronyms

<b>BWA</b>	Business Women's Association
<b>CAS</b>	Central Asian states
<b>CEE</b>	Central and Eastern Europe
<b>CIS</b>	Commonwealth of Independent States
<b>CSO</b>	civil society organization
<b>EBRD</b>	European Bank for Reconstruction and Development
<b>FA</b>	farmers' association
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FDI</b>	foreign direct investment
<b>FSU</b>	Former Soviet Union
<b>GDP</b>	gross domestic product
<b>IMF</b>	International Monetary Fund
<b>KAFC</b>	Kyrgyz Agricultural Finance Corporation
<b>NGO</b>	non-governmental organization
<b>PA</b>	peasant association
<b>SSR</b>	Soviet Socialist Republic
<b>TACIS</b>	Technical Assistance to the Commonwealth of Independent States
<b>UNDP</b>	United Nations Development Programme
<b>USSR</b>	Union of Soviet Socialist Republics
<b>WUA</b>	Water Users' Association

## Glossary

<b>dekhan</b>	smallholder
<b>kolkhoz</b> ( <i>pl. kolkhozy</i> )	collective farm
<b>mahalla</b>	neighbourhood organization
<b>nomenclatura</b>	a list of influential public positions filled by Communist Party appointees in the former USSR; Soviet elite
<b>oblast</b>	administrative region
<b>raion</b>	administrative subregion
<b>shirkat</b>	closed or open joint stock company (former collective enterprise)
<b>sovkhoz</b> ( <i>pl. sovkhozy</i> )	state farm
<b>tovarishchestvo</b>	partnership

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## Summary/Résumé/Resumen

### *Summary*

The agricultural and rural sector is of fundamental importance in the former Soviet Central Asian states. It is not only a crucial sector to the states' national economies, but is also important in providing employment, basic livelihood and social security. Deterioration of this sector and its social fabric can undermine civil society development, lead to social instability and endanger sustainable economic development. However, the sector has received little attention and is rarely seen as an indispensable part of societal transformation. In this paper, Max Spoor analyses agricultural reform and sector restructuring explicitly in relation to inequality and the role of civil society, based on statistical material and the author's fieldwork data.

To understand the differences and similarities in (agricultural) reform paths within Central Asia, the paper first describes the initial conditions. On the eve of their independence, Central Asian countries were characterized by a low level of industrialization, high population density, a predominantly rural population and a higher degree of poverty than elsewhere in the former Soviet Union. On the positive side, important social improvements had been realized under Soviet rule. The development of a rural social infrastructure not only eradicated rural illiteracy and introduced health care, but also provided rural dwellers (especially women) with salaried jobs.

The economic policy of the Soviet regime in Central Asia, like the tsarist regime before it, concentrated on primary sector resource extraction (natural resources and agriculture). In agriculture, this meant forced monoculture cotton expansion (especially in Tajikistan, Turkmenistan and Uzbekistan) to supply the centre. The subsidies from Moscow stopped after independence. However, because national elites still depended heavily on natural resource extraction (for example, agriculture and hydrocarbons), they have been reluctant to implement drastic reform, which could weaken their control. It is no coincidence that Kyrgyzstan, the country least endowed with natural resources, has been most reform oriented.

Overall, agrarian transformation in post-Soviet Central Asia has been more gradual than in Central and Eastern Europe and indeed most of the former Soviet Union. Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan have implemented various reform strategies with regard to agriculture, mainly determined by different initial conditions and the availability of natural resources. Land tenure systems have changed during the transition: most radically in Kazakhstan and Kyrgyzstan, through privatization and the breaking up of the old state and collective farms; in Turkmenistan and Uzbekistan through leasing land, leaving the large-scale enterprises in existence; and in Tajikistan land reform only took off after the end of the civil war in 1997, but advanced more quickly than in Turkmenistan and Uzbekistan. Individualization of production has increased throughout the region, whether through peasant farms (as in Kazakhstan and Kyrgyzstan) or the expansion of household plots owned by the workers at the (former) collective farms (as in Turkmenistan and Uzbekistan).

There is no simple correlation between the speed of land reform and the performance of the agricultural sector. Land reform and private farm formation can only stimulate private initiative and output when combined with a transformation of the state order system. In Turkmenistan and Uzbekistan, private farm performance is hampered by obligatory deliveries to the state and centralized input channels. On the other hand, a rapid (and often chaotic) liberalization of (input) markets, without the emergence of competitive marketing systems and necessary institutions – as in Kazakhstan and Kyrgyzstan – initially led to collapse of the markets.

Inequality has risen dramatically in the Central Asian states, and poverty rates are high. Poverty has increased particularly in rural areas (and most of all among women, many of whom lost their jobs in the decline of rural social infrastructure). This is related to the disarticulation of the previously existing social fabric in rural areas and the virtual absence of new institutions (such as civil society organizations and microfinance systems). Kazakhstan and Kyrgyzstan, the

reformist countries, although demonstrating active emergence of new civil society organizations, have the most problems in this respect. In these two countries, the break-up of collective farms resulted in the break-up of the social services they provided. The slow or non-reformist countries (Turkmenistan and Uzbekistan) have safeguarded some of this social fabric, but they see civil society development more as a threat than a necessity for rural recovery and development. Civil society in these countries is most likely to evolve from organizations that were either part of the state or connected to it.

With respect to the future transition and development agenda, the rural sector should become a priority, instead of the stepchild, of reform. Furthermore, reform should not be guided by efficiency alone, but also take equity into account. Institution building is important (for example, microcredit systems) and, whenever possible, collective structures should be transformed into service cooperatives rather than destroyed. Finally, new civil society organizations are urgently needed to build a market economy, and this requires a more open policy from governments.

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### **Résumé**

Le secteur agricole et rural est d'une importance fondamentale dans les Etats anciennement soviétiques d'Asie centrale. C'est un secteur crucial non seulement pour l'économie nationale mais aussi parce qu'il offre des emplois, un minimum vital et la sécurité sociale. La dégradation de ce secteur et de ce tissu social peut saper l'organisation de la société civile, entraîner une instabilité sociale et compromettre un développement économique durable. Pourtant, il a peu retenu l'attention et est rarement présenté comme un élément indispensable du changement social. Max Spoor analyse ici la réforme de l'agriculture et la restructuration de ce secteur par rapport à l'inégalité et au rôle de la société civile, en se fondant sur des études statistiques et sur les données qu'il a lui-même recueillies sur le terrain.

Pour comprendre les différences et les similitudes des réformes agricoles en Asie centrale, l'auteur commence par décrire la situation initiale. A la veille de leur indépendance, les pays d'Asie centrale se caractérisaient par un faible niveau d'industrialisation, une forte densité démographique, une population essentiellement rurale et une pauvreté plus forte que dans d'autres régions de l'ancienne Union soviétique. Du côté positif, d'importantes améliorations sociales avaient été réalisées sous le régime soviétique. Le développement d'une infrastructure sociale dans les campagnes avait permis d'éradiquer l'analphabétisme et d'introduire des soins de santé tout en offrant aux ruraux (en particulier aux femmes) des emplois salariés.

La politique économique du régime soviétique en Asie centrale, comme celle des tsars avant lui, avait surtout consisté à extraire les ressources du secteur primaire (ressources naturelles et agriculture). En agriculture, cela s'était traduit par une expansion forcée de la monoculture du coton (en particulier au Tadjikistan, au Turkménistan et en Ouzbékistan) pour approvisionner le centre. Les subventions de Moscou se sont arrêtées après l'indépendance. Cependant, comme les élites nationales étaient encore très tributaires des ressources naturelles extraites (de l'agriculture et des hydrocarbures, par exemple), elles n'ont pas voulu introduire des réformes trop poussées, qui auraient affaibli leur pouvoir. Ce n'est pas un hasard si le Kirghizistan, le pays le moins bien doté en ressources naturelles, a été le plus enclin aux réformes.

Dans l'ensemble, la transformation agraire dans l'Asie centrale post-soviétique a été plus progressive qu'en Europe centrale et orientale et, en fait, dans la plus grande partie de l'ancienne Union soviétique. Pour réformer leur agriculture, le Kazakhstan, le Kirghizistan, le Tadjikistan, le Turkménistan et l'Ouzbékistan ont appliqué des stratégies, dont les différences s'expliquent essentiellement par des conditions initiales différentes et la présence de ressources naturelles. Les systèmes d'occupation des sols ont changé pendant la transition; c'est au Kazakhstan et au Kirghizistan que les changements ont été les plus radicaux, avec la privatisation et le démantèlement des anciens kolkhozes. Au Turkménistan et en Ouzbékistan, des terres ont été louées mais les grandes exploitations ont subsisté. Au Tadjikistan, la réforme agraire n'a décollé qu'après la fin de la guerre civile en 1997, mais a avancé plus rapidement qu'au Turkménistan et en Ouzbékistan. La production s'est individualisée dans toute la région, soit par la création de fermes paysannes (comme au Kazakhstan et au Kirghizistan), soit par l'expansion des lopins familiaux que possédaient les travailleurs des anciens kolkhozes (comme au Turkménistan et en Ouzbékistan).

Il n'existe pas de corrélation simple entre la rapidité de la réforme agraire et le rendement du secteur agricole. La réforme agraire et la formation de fermes privées ne peuvent que stimuler l'initiative et la production privées lorsqu'elles se conjuguent avec une transformation du système de l'Etat. Au Turkménistan et en Ouzbékistan, les fournitures obligatoires à l'Etat et les circuits centralisés de distribution des intrants pèsent sur les rendements des fermes privées. D'autre part, sans la mise en place de systèmes de commercialisation compétitifs et des institutions nécessaires, une libéralisation rapide (et souvent chaotique) des marchés (des intrants), comme au Kazakhstan et au Kirghizistan, a commencé par entraîner l'effondrement des marchés.

Les inégalités se sont énormément creusées dans les Etats d'Asie centrale et les taux de pauvreté sont élevés. La pauvreté a gagné du terrain, en particulier dans les zones rurales (et surtout chez les femmes, dont beaucoup ont perdu leur emploi lorsque l'infrastructure sociale rurale a décliné). Cette évolution est liée à la l'effilochage du tissu social qui existait auparavant dans les zones rurales et à la quasi-absence de nouvelles institutions (telles qu'organisations de la société civile et systèmes de microfinancement). Ce sont le Kazakhstan et le Kirghizistan, pays réformistes, qui, malgré l'apparition de nouvelles organisations de la société civile, ont les plus gros problèmes à cet égard. Dans ces deux pays, l'éclatement des kolkhozes a marqué la fin des services sociaux qu'ils fournissaient. Les pays lents ou non réformistes (le Turkménistan et l'Ouzbékistan) ont préservé une partie de ce tissu social mais voient dans le développement de la société civile plus une menace qu'une nécessité pour le redressement et le développement des campagnes. Dans ces pays, la société civile a toutes les chances de naître d'organisations qui faisaient partie de l'Etat ou qui avaient des liens avec lui.

A l'heure de la transition et dans la perspective du développement futur, le secteur rural devrait cesser d'être le parent pauvre de la réforme pour devenir une priorité. De plus, la réforme ne devrait pas être guidée par la seule efficacité, mais se faire aussi selon des critères d'équité. La création d'établissements (de microcrédit par exemple) a son importance et, chaque fois que cela est possible, il vaudrait mieux transformer les structures collectives en coopératives de service plutôt que de les détruire. Enfin, ces pays ont un besoin urgent de nouvelles organisations de la société civile pour se doter d'une économie de marché, ce qui devrait inciter leurs gouvernements à adopter une politique plus ouverte.

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maintenir la liaison. A l'UNRISD, le projet a été dirigé par Kléber B. Ghimire avec l'aide de Francesca Bossano, Lucy Earle, Behzod Mingboev et Anita Tombez.

### **Resumen**

El sector agrícola y rural reviste una importancia clave en los Estados de la antigua Asia central soviética. No sólo es un sector fundamental para las economías nacionales de los Estados, sino también un importante proveedor de empleo, medios de vida básicos y seguridad social. El deterioro de este sector y de su estructura social puede minar el desarrollo de la sociedad civil, conducir a la inestabilidad social y amenazar al desarrollo económico sostenible. Sin embargo, apenas se ha prestado atención a este sector y raramente se le considera como una parte indispensable de la transformación de la sociedad. En este documento, Max Spoor analiza la reforma agrícola y la reestructuración del sector explícitamente en relación con la desigualdad y el papel de la sociedad civil, basándose en datos estadísticos y en datos de su investigación de campo.

Para ilustrar las diferencias y similitudes en las trayectorias de las reformas (agrícolas) en Asia central, el autor describe, en primer lugar, las condiciones iniciales. En vísperas de su independencia, los países de Asia central se caracterizaban por un bajo nivel de industrialización, una alta densidad poblacional, una población predominantemente rural, y una tasa de pobreza más elevada que la de cualquier otro lugar en la antigua Unión Soviética. En cuanto a los aspectos positivos, durante el régimen soviético se habían introducido importantes mejoras sociales. Con el establecimiento de una infraestructura social rural, no sólo se erradicó el analfabetismo rural y se introdujo la atención a la salud, sino que también se proporcionó trabajo remunerado a la población rural (en particular a las mujeres).

La política económica del régimen soviético en Asia central, al igual que el régimen zarista que le precedió, se centró en la extracción de recursos del sector primario (recursos naturales y agricultura). En la agricultura, esto supuso una expansión forzosa de la monocultura algodonera (especialmente en Tayikistán, Turkmenistán y Uzbekistán) para abastecer las zonas centrales. Las subvenciones estatales cesaron después de la independencia. Sin embargo, dado que las élites nacionales todavía dependían en gran medida de la extracción de recursos naturales (por ejemplo, la agricultura y los hidrocarburos), se han mostrado reacias a emprender una reforma drástica, que podría debilitar su control. No es mera coincidencia que Kirguistán, el país que cuenta con menos recursos naturales, haya sido el mayor defensor de la reforma.

En términos generales, la transformación agraria en el Asia central postsoviética ha sido más gradual que en Europa central y oriental y, por supuesto, más que en la mayor parte de la antigua Unión Soviética. Kazajstán, Kirguistán, Tayikistán, Turkmenistán y Uzbekistán han puesto en marcha varias estrategias reformistas en lo que respecta a la agricultura, determinadas fundamentalmente por condiciones iniciales diferentes y por la disponibilidad de recursos naturales. Los sistemas de tenencia de la tierra han cambiado durante la transición: de forma más radical en Kazajstán y Kirguistán, a través de la privatización y de la desintegración de las antiguas granjas estatales y colectivas; en Turkmenistán y Uzbekistán a través del arrendamiento de la tierra, por lo que sobrevivieron las empresas a gran escala, y en Tayikistán la reforma agraria comenzó apenas al término de la guerra civil en 1997, pero progresó más rápidamente que en Turkmenistán y Uzbekistán. La individualización de la producción se ha incrementado en toda la región, ya sea a través de las granjas de campesinos (como en Kazajstán y Kirguistán) o de la expansión de terrenos familiares pertenecientes a los trabajadores en las (antiguas) granjas colectivas (como en Turkmenistán y Uzbekistán).

No existe una correlación sencilla entre la rapidez de la reforma agraria y los resultados del sector agrícola. La reforma agraria y la creación de terrenos agrícolas privados sólo pueden estimular la iniciativa privada y la producción, cuando se combinan con una transformación del sistema de ordenación estatal. En Turkmenistán y Uzbekistán, el rendimiento de las tierras de cultivo de propiedad privada se ve obstaculizado por las entregas obligatorias al Estado y la

centralización del suministro de insumos. Por otra parte, una liberalización rápida (y muchas veces caótica) de los mercados (de insumos), sin la aparición de sistemas de comercialización competitivos e instituciones necesarias—como en Kazajstán y Kirguistán—condujo inicialmente al colapso de los mercados.

La desigualdad se ha incrementado drásticamente en los Estados de Asia central, y las tasas de pobreza son elevadas. La pobreza ha aumentado en particular en las zonas rurales (y sobre todo entre las mujeres, ya que muchas perdieron sus puestos de trabajo con el deterioro de la infraestructura social rural). Esto está relacionado con la desarticulación de la estructura social que existía anteriormente en las zonas rurales, y con la casi inexistencia de nuevas instituciones (como organizaciones de la sociedad civil y sistemas microfinancieros). Kazajstán y Kirguistán, los países reformistas, aunque han mostrado la activa aparición de nuevas organizaciones de la sociedad civil, son los que más problemas tienen a este respecto. En ambos países, la desintegración de las granjas colectivas se tradujo en la desintegración de los servicios sociales que éstas prestaban. Los países lentos o no reformistas (Turkmenistán y Uzbekistán) han protegido una parte de esta estructura social, pero consideran el desarrollo de la sociedad civil más como una amenaza que como una necesidad para la recuperación y el desarrollo del medio rural. La sociedad civil en estos países probablemente se desarrolle a partir de organizaciones que formaban parte del Estado o que estaban relacionadas con el mismo.

En lo que respecta a la futura transición y al programa de desarrollo, el sector rural debería adquirir prioridad, en lugar de relegarse a un segundo plano en la reforma. Asimismo, la reforma no debería orientarse únicamente por la eficiencia, sino que también debería tomar en cuenta la equidad. La creación de instituciones es importante (por ejemplo, sistemas de microcréditos) y, siempre que sea posible, las estructuras colectivas deberían transformarse en servicios cooperativos, en lugar de destruirse. Por último, el establecimiento de organizaciones de la sociedad civil reviste carácter de urgencia para crear una economía de mercado, lo que exige una política gubernamental más abierta.

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## I. Introduction

The agricultural and rural sector is of fundamental importance in the five former Soviet Central Asian states (CAS): Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. The level of importance can only be compared with other transition countries such as Albania, Armenia, Georgia, Macedonia and Moldova, that is, the poorer economies of Central and Eastern Europe (CEE) and the former Soviet Union (FSU). Looking somewhat further to the east, to Asian transition countries such as China, Mongolia and Vietnam, the agricultural sector is even more important. It is not only crucial to the states' national economies (despite producing a rapidly decreasing relative share of gross domestic product, or GDP), but also in terms of employment, basic livelihood provision and the rural-urban linkages that alleviate urban food poverty.

The agricultural and rural sector is rarely seen as an indispensable part of a country's social fabric, especially at this—still rather early—stage of development, although deterioration of this social fabric, because of a sudden break in economic linkages, insufficient productivity and a collapsing rural economy, can contribute to further economic crisis. Worse, it can undermine civil society development, produce widespread human insecurity and social instability, and endanger broad-based sustainable development. Nevertheless, during the transition period initiated with the fall of the Berlin Wall, and the subsequent collapse of the Union of Soviet Socialist Republics (USSR), relatively little attention was paid to this crucial sector. Macroeconomic stabilization, market and price liberalization, and the development of industry, extractive sectors and foreign trade were given primary importance. Agriculture remained the “stepchild” of reform. This is implicitly recognized in the European Bank for Reconstruction and Development's (EBRD) *Transition Report* (2002), the first to be dedicated mainly to agriculture and rural transition.

The marginalization of agriculture in transition strategies can be explained by at least three factors. First, the importance of the sector was underestimated when considered within a broader political economy framework. Only its contribution to economic output was considered, while its importance for the social system as a whole was largely ignored, even in those countries and areas where a large part of the population is actually rural, as in most of Central Asia.

Second, it is widely recognized that the reform of tenure systems, such as the privatization of land, has been slow, or in some countries non-existent, for much of the 1990s, in part because of pressures from rural elites opposing reform. The elites felt that tenure reform threatened their guaranteed sources of income (surplus extraction, rent seeking or subsidies). Agricultural and rural transition was not, therefore, high on the reform agendas of FSU countries. Only in some cases, such as Armenia, the Baltic states and Georgia, were redistributive land reforms (in combination with the restitution of land to previous owners or their descendants) implemented in the early stages of transition to increase popular support and enhance economic efficiency.

Third, transition experiences in Asia, which had already started in the 1980s, seemed to indicate that with the introduction of certain reforms, the agricultural sector automatically became a motor of development, rapidly expanding output. Neither the gradual manner in which reforms in Asia were implemented, nor the specific peasant-type economy these countries represented at the outset, were properly analysed by reformers in most of the FSU. In particular, the institutional transformation followed as part of the Asian transition guaranteed a high degree of continuity, and was substantially different to that followed by most of the FSU countries.

This paper analyses agricultural reform and sector restructuring, inequality and the role of civil society. The second section focuses on conditions at the outset of reform (a relatively low level of industrialization, large rural populations and poverty) and the particular place that agriculture had and largely still has in the Central Asian economies. It examines the legacy of the Soviet system, which on the one hand stimulated regional development through transfers from the central all-Union budget to the periphery, and on the other hand created a system of peripheral dependency, in which the Central Asian republics' role was to provide primary sector raw materials. This section reveals that the agricultural and rural sector, in terms of food pro-

duction, input for light industries, employment and residence of a majority of the population, was more important than would appear from its contribution to GDP. Even with respect to GDP, the sector was more dominant in Central Asia than it was in most of Central and Eastern Europe and the FSU.

This background will form the basis of the third section, a comparison of the processes of agricultural reform and farm restructuring in the five countries, focusing on the transition experiences and strategies of the former Soviet CAS at macro and sectoral levels. Land reform in Central Asia, as is analysed below, has been implemented gradually, with the exception of Kazakhstan and Kyrgyzstan, which have both moved rapidly since the mid-1990s.

Section four presents a critical analysis of macroeconomic growth and agricultural sector performance in these countries. A comprehensive dataset will show clear trends in land use, including shifts in crop mix and output, and the growing influence of the household plot economy. This will be followed by discussion of the results within a political economy framework—as transition strategies have differed fundamentally. This performance analysis will be correlated with initial conditions and the degree and content of reforms implemented at the macro and sectoral levels, and will show that rapid reform is no guarantee of better performance, particularly in a context of missing markets and institutions, an issue that was seriously underestimated at the outset of reform.

In the fifth section, the analysis moves to the phenomenon of growing inequality as a consequence of unbalanced structural transformation: a transformation focusing largely on stabilizing the macroeconomy and stimulating a few specific sectors, such as industry and trade, and heavily biased towards urban infrastructural development. Urban-rural inequality is growing, and there is increasingly unequal access to productive assets, expressing itself in a higher incidence of rural poverty. The origins of this phenomenon are analysed in this section, as they differ substantially in each country. In some countries of the Central Asian region, growing inequality and poverty are caused by a weak institutional framework, combined with land reform and market liberalization. In several places, like Kazakhstan and some parts of Kyrgyzstan, powerful representatives of the rural elite have taken control of most of the distributed assets (land, buildings and machinery). Elsewhere, in countries that followed a much more cautious or gradual reform path, such as Turkmenistan and to a varying degree Uzbekistan, the agricultural sector continues to be heavily taxed through the state order system of cotton and wheat and the state's overall control of marketing systems.<sup>1</sup> Although this caution might prevent the rapid increase of rural inequality, lack of sufficient investment and limited possibilities for farms to improve their yields and the marketing of their output severely hamper income development. Inequality is much more related to political or social capital, and dependency on patronage systems. It might ensure the continuation of the traditional safety networks, but it can also cause exclusion.

In the sixth section, the relation between agricultural reform—in particular the reform of tenure systems and the restructuring of collective and state farms toward what Lerman (2003) defines as the individualization of agriculture—and the development of grassroots organizations and, broadly speaking, civil society, is discussed. Depending on how civil society is defined, the idea that civil society needs to be built from scratch is considered to be wrong. As Roy (1999) has correctly pointed out, the *kolkhozy* (collective farms) in the Central Asian Soviet Socialist Republics (SSRs) were very much social organizations, in some ways representing a continuation of previously existing traditional tribal, clan or ethnically based forms of social organization. They were often different in their positioning toward the state: rather than simple representatives of the remote interests of the state, as many Russian *kolkhoz* managers were, *kolkhoz* managers in Central Asia were local notables with roots and vested interests in the locality, which in many cases grew after independence (Roy 1999:115).

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<sup>1</sup> The state order system, instituted in the Soviet era, managed supply and demand instead of the market. The state calculates the quotas of crops it requires from farmers, and farmers obtain supplies through the same system.

Reform agendas mostly focus on privatization and the transferability of land, the building of land markets, and input and output liberalization, with the ultimate aims of improved economic efficiency, and increased yields and output performance. However, the social function of the collective farms, which were, and most often still are, dominant in the rural areas of Central Asia, is often not considered, and the post-independence municipal administrations are certainly not in a position to take over the social services that were traditionally delivered through or by the collective farm.<sup>2</sup>

Finally, in the last section, conclusions are drawn from the above analysis, in particular regarding the institutional gaps that emerged during transition, and the role of already existing (but transforming) and newly developing civil society organizations (CSOs). On the one hand, there is pressure to reform and attain a higher degree of economic efficiency in order to improve growth performance, along the traditional lines of the Washington consensus, but with increased emphasis on institutional transformation (see EBRD 2002). On the other hand, there is the danger that this process is destroying the social fabric of rural organizations, which represent the currently predominant form of civil society. The development of markets must go hand in hand with the construction of new forms of association at the micro and meso levels. These are necessary to avoid destitution, apathy and disintegration of rural areas, expressing itself in rural-urban migration, leaving behind greying or even dead villages, as has already happened throughout the FSU, and in some areas of Central Asia, notably Kazakhstan and Kyrgyzstan.

## II. Conditions in Central Asia at the Outset of Transition

The initial conditions in the former Soviet Central Asian states that became independent nation-states in late 1991 were on the whole not very favourable. They did have a rich endowment of mineral resources, such as oil (Kazakhstan), natural gas (Turkmenistan, and to a lesser extent Uzbekistan), precious metals such as gold and tungsten (Kazakhstan, Kyrgyzstan and Uzbekistan), or thermal potential (Kyrgyzstan and Tajikistan). But more problematic initial conditions included a low degree of industrialization and technological development; a higher degree of poverty than elsewhere in the former Soviet Union; predominantly rural populations; and population pressure in many areas (despite the considerable overall size of Central Asia, much of the region consists of desert and steppe, both of which are rather inhospitable environments).

Industry was not particularly developed in Central Asia during the Soviet era. It was concentrated largely in the extraction of mineral resources. These extractive mines were isolated pockets of industry with little final processing capacity; crude oil was transported directly to the centre. Possibly only the agro-industry of Uzbekistan had developed backward and forward linkages between agriculture and industry, although even here scarcely any textile industry emerged. A number of specialized industries were decentralized in the last decades of the USSR, such as the torpedo factory in Kyrgyzstan, a large aluminium complex in Tajikistan, and the Aeroflot plant in Uzbekistan; but they too were barely connected to local industrial development.

The total surface area of Central Asia is enormous (nearly four million square kilometres), and the population is relatively small (50.8 million in 1991, 55.5 million in 2001) (StatKom SNG 2002). These data, however, are somewhat misleading; both urban and rural populations are concentrated in relatively small areas, mostly located along the major rivers and around traditional oases. Most of the remaining areas are desert, steppe or mountainous and are largely uninhabitable, therefore access to fertile (in most cases, irrigated) land is very limited. The region's population grew rapidly during the 1980s, but after 1991 this process became rather differentiated. Tajikistan and Turkmenistan still have high population growth, and Uzbekistan somewhat less, while Kazakhstan and Kyrgyzstan have been confronted with considerable out-

<sup>2</sup> Olivier Roy (1999:109) on the rural areas in Central Asia: "They are until now organised along the *kolkhoz* system, which is an administrative, economic and sociological entity. The issue of the *kolkhoz* (collective farm) system is the core of any approach to the building of a civil society. Maintaining, reshaping or destroying the *kolkhoz* is also a practical issue as far as economic development is concerned".

migration rates, as the Russian (and German) minorities left during the initial—extremely nationalist—period of independence.

When the Soviet Union collapsed, the Central Asian societies still had large rural populations. For example, in Uzbekistan, the most populous of the CAS, around 60 per cent of the population resided in rural areas and was largely dependent on the agricultural sector (table 1).

**Table 1: Rural population and agricultural employment**

	Arable land per rural resident (hectares)	Rural population as share of total (per cent)			Agricultural employment as share of total (per cent)		Share of agriculture in GDP (per cent)	
	1990	1980	1990	2000	1991	2001	1991	2000
Kazakhstan	5.00	45.8	42.7	44.1	24.0	36.0	28.1	9.7
Kyrgyzstan	0.52	62.0	62.0	65.3	35.0	53.0	35.0	34.2
Tajikistan	0.22	65.8	68.0	73.5	44.0	65.0	26.1	17.4
Turkmenistan	0.60	—	55.0	56.4	41.0	48.0	46.0	26.0
Uzbekistan	0.37	59.4	59.4	62.6	41.0	34.0	33.4	27.0

Source: World Bank 1993b; StatKom SNG 2002; Lerman and Brooks 1998.

It is interesting to note that the predominant position of the rural areas in terms of population has persisted over the past two decades. In fact, during the decade of transition, the rural population grew as a share of the total, in particular in Tajikistan. This does not mean that there was no rural-urban migration—this did occur in Kazakhstan and Kyrgyzstan. However, in these cases the out-migration of urban dwellers, to Russia for example, outweighed this phenomenon. In countries such as Turkmenistan and Uzbekistan there has been hardly any rural-urban migration. Only in Kazakhstan is the urban population slightly larger than the rural population.

Furthermore, agricultural employment seems to have increased substantially during the 1990s (with the exception of Uzbekistan), which can partly be explained by the sharply decreasing relative share of employment in other sectors, in particular in industry. However, agriculture's relative share in GDP has declined quite rapidly. This is to be expected, as economic growth in most countries where this development is prominent has been the result of rapidly growing extractive sectors, such as oil in Kazakhstan and Uzbekistan, and gas in Turkmenistan. (Although in a country that has no hydrocarbons, such as Kyrgyzstan, the role of agriculture—measured by its contribution to GDP—has remained almost constant.) Agriculture's reduced contribution to national income hides its continuing crucial importance in terms of employment and the size of the rural population.

Poverty has always been more prevalent in Central Asia than elsewhere in the FSU. This phenomenon is very difficult to measure in retrospect, but some indicators can be used. In 1990, on the eve of the break-up of the Soviet Union, average wages in the former Central Asian republics were substantially lower than those in Russia.

Using data from table 2, we can calculate that the difference between average Central Asian wage levels and those in Russia was 41.4 per cent. The economy-wide average for the "poorest" country, Tajikistan, as measured by this indicator (and most likely by others as well), was 46.4 per cent of the average for Russia. The differences with the more developed, western parts of Russia must have been substantially larger. On top of countrywide poverty, rural poverty was (and still is) an important, but largely hidden, societal phenomenon in Central Asia. These nominal wage data do not reveal real purchasing power, and therefore do not indicate the stan-

dard of living. However, they are indicative of the differences in real income levels, as price levels were centrally controlled in the FSU and therefore largely the same.

**Table 2: Wage differentials and poverty in the former Soviet Union, 1989–1990**

	Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Russia
Average monthly wage (in 1990 roubles)	142.9	104.1	82.9	102.3	91.3	178.7
Poverty rate 1989 (per cent)	15.5	32.9	51.2	35.0	43.6	5.0

**Note:** In 1990, \$1 = 0.94 roubles. **Source:** Falkingham 2000:73, 77.

In sum, Central Asia suffered a whole range of unfavourable initial conditions. Limited industrialization meant there was little migration to the cities, and with a growing population, high population pressure was observed in fertile areas of the countryside. Poverty, although hidden, remained a feature of the region.

On the positive side, important social improvements were realized under Soviet rule. Health provision and an effective system of universal education were established throughout the region. At the start of the Soviet era, some 95 per cent of the indigenous population of the CAS was illiterate. A massive campaign to eradicate adult illiteracy was launched in the late 1920s. Shortly after, free and compulsory primary education was introduced for all children, male and female. By the 1960s, virtually 100 per cent literacy had been achieved. The development of a rural social infrastructure not only eradicated rural illiteracy and introduced health care, but also provided the rural population with significant sources of non-farm, salaried employment, especially for women (for instance as teachers, health personnel or workers in the local planning apparatus). These jobs have been among the main casualties of post-Soviet recession, contributing to a feminization of poverty (Kandiyoti 2000).

Most of the rural social infrastructure was organized by the *kolkhozy* (cooperatives) and *sovkhozy* (state farms). These farms were largely inefficient in economic terms and had become predominantly social units. Collective farms had incorporated traditional forms of labour exchange and social safety networks widespread in Central Asia, through extended families and clan or kinship relationships.

Since independence, Western advisors have generally proposed the transfer of social infrastructure to the local authorities, and conversion of the farms into purely economic, market-oriented units. However, as is observed in other parts of the former Soviet Union, local authorities have rarely been able to take over these (financial) responsibilities (Visser 2003b). Within Central Asia, governments have followed different approaches with regard to rural social infrastructure, with (potentially) different impacts on the formation of civil society and poverty (see section five).

### ***Tsarist and Soviet legacies in the Central Asian economy and agricultural sector***

In order to understand the agricultural sector in Central Asia, it is necessary to return briefly to the expansion of tsarist rule over the area known as Turkistan, with important trading centres such as Samarkand, Tashkent and Bukhara. After the 1860s, several areas of Central Asia were absorbed by the Russian empire (Carrère d'Encausse 1988). At the time of colonization they were largely agricultural, semi-nomadic and pastoral societies, with deeply entrenched feudal structures of land and water ownership. It was only in 1920 (a few years after the October Revolution) that the traditional regimes in these states were overthrown by the Bolsheviks, and from 1924 a process of formal inclusion and delineation of current borders with the USSR took place. The

Central Asian states in their current formation were therefore latecomers to the Soviet Union, but had already passed through a long process of Russian colonization (Spoor 1993:144).

For the Russian empire, Central Asia<sup>3</sup> represented not only a region with vast natural resources but also a strategically important stronghold. There were seemingly unlimited opportunities for agricultural production, for the establishment of settler economies, and for the extraction of gas, gold and other valuable minerals, especially given the presence of a cheap labour force. The latter, in combination with a favourable climate and available water resources, led to a rapid expansion of cotton production, which was to become an extremely important part of the region's political economy.

Cotton was already widely cultivated in the areas around the main rivers, Syr Darya and Amu Darya, before it became so important to the Russian empire and later the USSR. The feudal system had produced intricate and effective means of water control, crucial in the semi-desert region that prevails in Central Asia. Cotton was produced as a cash crop and was well integrated in traditional production systems, rotating with, for example, lucerne, which was consumed by cattle, who in turn fertilized the soil with their manure. In the 1860s, when civil war in the United States hampered its cotton exports, Russia turned to Central Asia for this crucial crop, sometimes referred to as "white gold" (Spoor 2000). Central Asia became the major provider of raw cotton for textile factories in Russia and Ukraine. As stated above, prior to the October Revolution, cotton production in Central Asia was reasonably balanced with grain and fruit production systems. Grain crops such as wheat and barley were cultivated in winter and summer (or spring). This system was still in use in the 1940s, but had been largely eliminated by the introduction of intensive cotton cultivation (Rumer 1989). As better soils came to be reserved for the white gold, more marginal soils were left for grain, which were then reduced to single cropping patterns.

Uzbekistan can be taken as an example of the "forced cotton expansion" policy (also applied in south Kazakhstan, southwest Kyrgyzstan, Tajikistan and Turkmenistan). The area used for cotton cultivation increased rapidly, from 441,600 hectares in 1913 to 1,022,600 hectares in 1940. Production was carried out on *kolkhozy* and *sovkhozy*, which were established in the early 1930s after a period of wide-ranging land reform during the second half of the 1920s (Khan and Ghai 1979:38–39). The completion of the Karakum Canal was a major boost to cotton production. The canal diverts water from the Amu Darya into the southern desert regions of Turkmenistan and Uzbekistan. The area used for cultivating cotton increased from 1,427,900 hectares in 1960 to 1,709,200 in 1970, reaching 2,000,000 in the early 1980s (Spoor 1993:147–149). Economies, and in particular the ruling regimes, became heavily dependent on white gold, but in terms of sustainability the policy led to environmental disaster, causing the drying up of the Aral Sea (Spoor 1998). In the Central Asian SSRs, agriculture became the single most important sector in a "neo-feudal system" (Pomfret 2001:57), with cotton being a crucial industrial crop in specific regions of Kazakhstan and Kyrgyzstan, and in Tajikistan, Turkmenistan and Uzbekistan.

### ***The political economy of the Central Asian states***

The process of building independent states and economies in Central Asia during the past decade was complicated. The peripheral Soviet republics suddenly became independent countries, and all economic policy decisions had to be made by national governments. On the one hand, this meant that previous transfers of wealth from the republics were halted and were replaced by exports (quite soon in exchange for hard currency). On the other hand, the expenditure and investments that came from the all-Union budget were cut off, and all imports—whether from the Commonwealth of Independent States (CIS) or elsewhere—had to be paid for.

In most of the CAS there was a tendency toward the centralization of economic and political power after independence. The legacy of the extractive political economy, which underpinned the centre-periphery dynamic between Moscow and Central Asia, is evident. The most impor-

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<sup>3</sup> In fact, most of the region was called Middle Asia, as Kazakhstan was considered to be within the Russian sphere of influence.

tant difference with the Soviet period was that the national elites could now retain the agricultural and mineral surplus for themselves, instead of having to transfer it to Moscow. As is shown below with regard to agriculture, particularly in Turkmenistan and Uzbekistan, old centralized structures of surplus extraction have remained in place, and this is true for mineral resources throughout the region. In Kazakhstan, Turkmenistan and Uzbekistan the leaders of the former Soviet republics remained in office, just relabelling themselves as nationalists.

With weak legitimacy due to their role as former communist leaders, and the challenge of ruling multiethnic states with fuzzy borders and divided by clans, these presidents maintained power in the first years of independence by a combination of centralized control and extreme nationalism. The latter often meant the removal of considerable Russian minorities from the centres of power, provoking a migration that had immediate negative consequences on industry and academia. This process of concentrating power in the hands of pre-existing local elites also meant that there was substantial reluctance to introduce economic reform (except in Kyrgyzstan, which soon became the “donor’s darling”). The leaderships always considered transition toward a market economy in the context of their overall objective of staying in power.

Nevertheless, there were important differences in the speed of, and dedication to, reform across the region, despite the broadly similar initial conditions outlined above. To understand the different reform paths that were chosen, it is important first to discuss the two basic pillars upon which Central Asian economic development rests: mineral resources and agriculture.

With regard to natural resources, Kazakhstan and Turkmenistan were generally seen as the most endowed countries at the start of their independence. Tarr (1994), in his calculations of the terms of trade impact of moving from Soviet to world prices, found Turkmenistan (50 per cent) and Kazakhstan (19 per cent) to be big gainers, while Kyrgyzstan (1 per cent) and Uzbekistan (-3 per cent) were hardly affected, and resource-poor Tajikistan, the poorest country of the region, could be expected to suffer.

Turkmenistan, with its abundant natural gas, and Kazakhstan with its oil and mineral wealth and as yet unexploited oilfields, were both expected to gain economically from independence. In reality, Turkmenistan managed to maintain its gas exports, but experienced payment difficulties, and has done little regarding further economic development. In Kazakhstan natural resource development has been stimulated by substantial foreign direct investment (FDI) in the oil sector, which has provided a boost to the Kazakh economy. However, difficulties with existing pipelines through Russia and Ukraine and the financing of new pipelines have meant oil exports have been lower than planned. The resource wealth of Uzbekistan is lower (mainly gas and precious metals), but has been developed by taxing the agricultural sector and public investment. As has been observed, except for some precious metals, resource endowment was even lower in Kyrgyzstan and practically non-existent in Tajikistan.

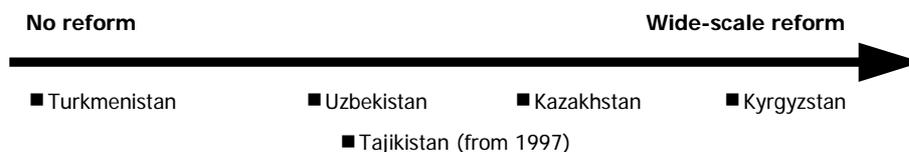
In agriculture, cotton is the most important cash crop. Uzbekistan, with its large irrigated areas along the Amu Darya and Syr Darya, is best endowed for cotton production. The country was (and still is) the biggest cotton producer in the region, with more than 60 per cent of the total production in the former Soviet Union. About 40 per cent of arable land was used for cotton production at the start of independence. Turkmenistan, the second-largest country in the region, has a much smaller agricultural sector as it is largely desert. Only 4 per cent of agricultural land in the country is arable, and population density in relation to arable land is very high, with 0.6 hectares of arable land per person (see table 1) – compared to an average of 2.3 hectares for the former USSR. Concentration on cotton was heaviest in Tajikistan, where, in parts of the republic, 85 per cent of arable land was used for its cultivation. This country is mainly mountainous and has the highest population density in rural areas (see table 1). With cotton cultivated on its sparse arable lands, it is not surprising that in the civil war and economic depression of the 1990s Tajikistan was unable to grow or import enough food. It was only because of international food aid that the country did not face a disastrous food deficit. These cotton-oriented countries, especially Uzbekistan, stimulated an increase in wheat production after

independence (partly at the cost of cotton, but mainly replacing fodder crops) to become more self-sufficient in food production (Spoor 2000). Nevertheless, the national elites continued to hold a stake in large-scale cotton production as the main cash crop (especially during the 1990s, when cotton prices were high).

Kazakhstan and Kyrgyzstan have never had large-scale cotton production, due to a lack of irrigation (Kazakhstan), mountainous terrain and an inconducive climate, except for southwest Kyrgyzstan, which is a part of the fertile Fergana valley. Kazakhstan, with its vast steppes, however, has very favourable conditions for extensive grain production. Grain became the most important export crop in Kazakhstan during the Soviet era, in particular after the 1950s “virgin lands” campaign, which forcefully expanded grain-producing areas in the northern part of the Kazakh SSR. Furthermore, Central Asia had a large meat production sector. Extensive animal husbandry was spread over the entire region, supported by state-run fodder and distribution systems (even operating between the republics). This extensive, low-income form of agriculture was (and remains) vital for Kyrgyzstan, especially for wool and mutton production.

Though reluctance to reform can be observed throughout Central Asia, important differences did emerge among the countries’ transition paths, especially during the mid-1990s. These differences can be explained to a great extent by the different initial conditions with regard to mineral resources and agriculture. Seen on a moving scale (see figure 1), Turkmenistan is now the least reformed and Kyrgyzstan the most.

**Figure 1: Transition paths of the Central Asian states**



This is true not only on the basis of economic reform indicators presented in table 3, but also by taking the political regime and the formation of CSOs into account. Whereas in the mid-1990s shock therapy was still the undisputed recommended panacea for reform, in the absence of which only “muddle-through” scenarios could be envisaged (World Bank 1996), these different transition paths have recently been studied in a more objective manner.<sup>4</sup> Broadly speaking, the Washington consensus-type of reform package, which albeit today pays more attention to institutions, still considers the gradual reform path—as followed in Uzbekistan—to be faulty and economically inefficient.

<sup>4</sup> Alam and Banerji 2000; Pomfret 2001; Zettlemeier 1999.

**Table 3: Economic reform indicators in the Central Asian states, 1997–2000**

	Kazakhstan		Kyrgyzstan		Tajikistan		Turkmenistan		Uzbekistan	
	1997	2002	1997	2002	1997	2002	1997	2002	1997	2002
Large-scale privatization	3	3	3	3	2	2+	2	1	3–	3–
Enterprises/small-scale privatization	3+	4	4	4	2	4–	2	2	3	3
Governance restructuring	2	2	2	2	1	2–	2–	1	2	2–
Markets and trade/price liberalization	3	3	3	3	3–	3	2	2	3–	2
Trade and foreign exchange	4	3+	4	4	2	3+	1	1	2–	2–
Financial system/competition policy	2	2	2	2	1	2–	1	1	2	2
Bank reform/interest rates	2+	3–	3	2+	1	2–	1	1	2–	2–
Security markets/non-bank institutions	2	2+	2	2	1	1	1	1	2	2

**Note:** The reform indicators vary between 1 (= lowest/no reform) and 4+ (= highest/full-scale reform). The plus and minus signs represent degrees of reform slightly above and below that number (for example, 2+ is slightly lower than 3–). **Source:** EBRD 1997, 2002.

While a gradual reformer such as Uzbekistan has done economically (and socially) better than a more rapid reformer such as Kazakhstan, the latter has attracted much more FDI and is currently growing faster (with growth boosted by the oil sector). The EBRD has developed a detailed set of economic reform indicators, and each year it publishes the performance of all CEE and FSU countries. A comparison of the performance of the CAS according to the indicators for 1997 and for 2002 shows that the graphic picture of the reform paths (figure 1) corresponds accurately.

In Kyrgyzstan, the new regime pursued a strategy of shock therapy, which was substantially supported by grants and loans from the international financial institutions and bilateral donors. This is not surprising for a small landlocked country with very limited resources in terms of mineral wealth, a small population and a low-income agriculture consisting mainly of extensive animal husbandry. The implementation of Washington consensus-type reforms, which would be rewarded with foreign aid, was necessary for survival. In the other countries, such as Turkmenistan and Uzbekistan, where elites have substantial domestic opportunities for resource extraction, reforms were slower or more gradual (the exception was Tajikistan, where the civil war was responsible for an initial lack of reform).

Even in Kazakhstan, which can be characterized as the second most reform-oriented country after Kyrgyzstan, it took until 1994–1995 for a serious programme of market-oriented reforms to be implemented. Moreover, implementation proved less straightforward than in Kyrgyzstan. The agricultural sector was not as important in Kazakhstan as it was in the cotton-oriented states of the region, and its share in GDP declined still more drastically in the 1990s (see table 1). The Kazakhstan government focused on mineral resources, which form by far the most important source of income. Privatization in Kazakhstan can be described as inconsistent shock therapy – Popov’s (2001) description of Russian privatization – albeit with more shock and even less consistency (Pomfret 2001).

In Uzbekistan the importance of agriculture as the main form of resource extraction undoubtedly made the regime more resistant to liberalization and privatization. Furthermore, the dependence of Uzbekistan’s agriculture on irrigation provided an extra obstacle to full-scale pri-

vatization, as the authorities feared that the disbanding of collectives and central control would lead to a breakdown of, or conflict over, the complex irrigation system. Cotton is also the main crop in Turkmenistan, which was virtually a non-reforming country until at least around 1997. However, natural gas, not agriculture, is the most important sector of the economy. Profits from the gas sector have been used to maintain a planned economy in Turkmenistan, but the country is finding it increasingly difficult to maintain this system and has been forced to introduce (very gradual) reforms.

Although all the CAS countries followed transition paths during the 1990s, however different, there was also stagnation—and in some cases even retreat from reform. Only Tajikistan showed continuous progress in economic reform following the end of the civil war and the beginning of peace (see table 3).

What could be the reasons for the apparent retreat from reform, or at least stagnation? There are clear signs within the political establishment that maintaining power and national (and personal) interests are more important than the desire for economic efficiency, growth or sustainable development. The continuing dominance of central governments (and the presidential apparatus) over the strategic sectors (oil, gas, metallurgy, cotton and in some cases, grain) is mainly inspired by rent-seeking motives, which could further delay economic reform as they undermine central government revenues. In this sense the states are indeed “predatory”, as understood by the development-oriented literature. These are strong states, and are quite the opposite of the original concept of a developmental state. Without profound structural and institutional reform, no improvement in the current situation of widespread corruption, bad governance and inefficiency is to be expected. An aspect that also should be of concern to those who focus on economic reform indicators is the absence of a strongly developed civil society. In Turkmenistan and Uzbekistan, there is an active policy to repress independent CSOs in any form, for fear of dissent. Even in Kazakhstan and Kyrgyzstan, where freedom of the press is more developed, civil society can only develop within limited margins established by the regimes.

### III. Land Reform and Farm Restructuring

Privatization of land and other assets and the restructuring of the previously dominant *sovkhosy* and *kolkhozy* have been the focal points in many CEE and FSU countries’ transition strategies.<sup>5</sup> Although reforms have shown great diversity in form and implementation, there is broad consensus regarding the reasons behind the stagnation of agriculture during the final stages of the Soviet regime. First, the very large state and collective farms—despite having been established to benefit from economies of scale—suffered from low productivity and were inefficient in their use of resources, particularly capital. Technological innovation lagged, as did crop yields and the quality of production. Second, in the collective farms, free-rider behaviour was dominant and members’ or workers’ incomes, as well as overall production, had to be supplemented by the produce of household plots, which had much higher land and labour productivity (partly because they used subsidized inputs provided by the collective farm). Third, these farm enterprises were taxed through the state order system, which included compulsory procurement for low, state-controlled prices and provided disincentives to farm enterprises. This system led in most cases to a net transfer out of agriculture, even after taking the inflows of subsidized credit, public investment and services into account. But apart from being production units, the *sovkhosy* and *kolkhozy* in the CEE and FSU countries had important social functions, providing their members not only with basic income and food, but also social and health services, the latter becoming a complicating factor in the farm restructuring process. In Central Asia these social functions were very much linked to ethnic, kinship, clan or family relations within the farm enterprise (Roy 1999).

As stated above, post-1991 reforms in the agricultural sector of Central and Eastern Europe and the former Soviet Union focused on the privatization of assets, in particular of land, and the trans-

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<sup>5</sup> Wegren 1998; Spoor and Visser 2001; Swinnen 2003; Lerman 2003.

formation of the existing state and collective farms. It has been shown that the reforms in the CEE and FSU countries diverged in content and implementation. In a study of nine countries in CEE, Mathijs and Swinnen (1996) note that privatization took the form of distribution of assets to workers or members, restitution of assets to former owners, sale of assets (with a variety of conditions attached) and leasing arrangements. Farm restructuring led to new forms of association, namely cooperatives, joint stock companies, partnerships, associations of peasant farms, private farmers and peasants. Sometimes these represented cosmetic changes, in other cases they were more profound and really transformed enterprises (Mathijs and Swinnen 1996:14). Many differences can also be observed within the Russian Federation.<sup>6</sup>

This comparative study of the CAS—which are relatively underresearched and therefore less well known in the literature on transition—will also reveal diversity. The differences are not explained by a simple categorization of slow, gradual or rapid reform. There are great differences in these countries in the sequencing and the extent of reform, both at the macro level and in regard to the agrarian sector, but there are equally unexpected and contradictory 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 there are calls for a deepening of reform, in particular regarding land privatization—which is seen as a precondition for farm efficiency—the diversified and dynamic nature of current farm restructuring is increasingly recognized.

Analysing Kyrgyzstan, which is often seen as a showcase for reform among the CAS, Delehanty and Rasmussen (1995) also come to the conclusion that many of the transformations were initially cosmetic. Even after the push in agrarian reform during 1994–1995, the private farm sector developed gradually, while other so-called reformed sectors, such as joint stock companies, cooperatives and peasant associations, still retain some of the—largely inefficient—features of Soviet management practices. At the other end of the scale, Kazakhstan has gone through a wide-ranging process of farm restructuring, but has in most cases done this without sufficient preparation, policy or institution building, which has contributed to the current profound crisis in agriculture. These examples show the complexity of the reform process and its impact, which will be further explored in this paper using field reports (in addition to sectoral and macro data).

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 accepted as crucial to agricultural reform (Lerman 2003). During the first half of the 1990s, however, these reforms proved very difficult to execute. According to one World Bank study, only 8 per cent of the farm sector in Russia was really privatized by early 1993 (Brooks and Lerman 1994:42). The process remained slow and complex in subsequent years (Csaki and Lerman 1996; Spoor and Visser 2001). In Central Asia in particular, state ownership of land was maintained, and the distribution of land to *sovkhoz* workers and *kolkhoz* members was in most cases only in the form of usufruct rights, with wide variations between countries as regards inheritance and tradability. In Kyrgyzstan, although land sales became possible in 1998, the government immediately decided to impose a five-year moratorium on them. Furthermore, changes in farm enterprises—such as the formation of joint stock companies, farmers' cooperatives and *tovarishchestvo* (partnerships)—were often nominal. This reveals the existence of political and social forces representing vested interests, but in some cases it also points to a certain hesitation among the farming population to embark upon private farming in the absence of rural input, output and credit markets.

Why has relatively little land really been privatized (despite the CAS governments' consideration of some of the above-mentioned, mostly quite superficial, ownership transformations as privatization)? There are a number of reasons. First, there were initially insufficient incentives for farm employees to break away from collective structures. New markets for inputs and outlets for production are emerging in a very slow and fragmented manner, and credit is rarely available to private farmers. Output is still controlled by monopolistic, state or parastatal organizations, espe-

<sup>6</sup> Brooks and Lerman 1994; Spoor and Visser 2004; Visser 2003a; Wegren 1998.

cially in Turkmenistan and Uzbekistan. Moreover, private farms in these countries often have to make obligatory deliveries of cotton, and thus have little choice over their product mix. Reform of the state order system has a strong influence over the speed of land reform and private farm creation (see section four). A final disincentive is that the social infrastructure of education and public health is still related to the old structures.

Second, the rural *nomenklatura*<sup>7</sup> clings to power, and even hopes to increase it. Keeping the previous structures intact (albeit under another name) improves the *nomenklatura*'s chances of remaining in social and political control of the rural areas (Spoor 1995). As highlighted in the previous section, the position of the national elites depends heavily on continued resource extraction from agriculture since Moscow's financial transfers to the large government apparatuses in these countries ceased. In the Russian Federation, more far-reaching farm privatization (and liberalization) has been conducted. In terms of private farm creation and share of the private sector in production, the Russian Federation has performed better than the CAS, with the exception of Kyrgyzstan (with its low-income agriculture) and, at certain periods, Kazakhstan (Spoor and Visser 2001). In the Russian Federation, the national elite was barely interested in agriculture, as natural resources and industry were far more important sources of resource extraction, and it therefore did not cling to central control over the sector. Notwithstanding, on a regional level, authorities in Russian provinces where agriculture takes up a large share of the regional economy have been more resistant to privatization and liberalization (Amelina 2002). When land is privatized in Central Asia, it is the former communist elite that seems to acquire control over most of the best land. Newly established enterprises (joint stock companies, peasant associations, cooperatives, etc.) are still closely tied to surviving large-scale state trading and processing companies (in Uzbekistan and parts of Kazakhstan), forcing them to maintain their structure and previous operating methods. Peasant farms—sometimes physically within the perimeters of the former *kolkhoz*—still depend on the *kolkhoz* farm manager for inputs and sales (Lerman et al. 1996).

A third reason for slow privatization in Central Asia is that agricultural production depends heavily on large-scale irrigation systems. There is a fear, in particular in Uzbekistan, that the break-up of large production units into small peasant farms will lead to the deterioration of existing irrigation structures (Lerman et al. 1996).

Fourth, the governments of the CAS want to ensure that the land privatization process does not lead to ethnic conflict, as it did in Osh in 1990, when access to land was a major issue in the violent and bloody riots between the Kyrgyz and Uzbeks (for similar reasons, almost the only region in the Russian Federation where private land ownership has not been introduced is in the ethnic patchwork of the north Caucasus). There are also tensions in Kazakhstan, in particular between the Russian farming population and the Kazakhs on the northern plains.

Therefore leasing (although often with rights of heritage and long leasehold periods) has been the most advanced step on the road to land privatization, and most land is still owned by the state. Distribution to households of usufruct rights to farm on small plots of state-owned land is widespread, while subcontracting of collective land to households, and the formation of "private" peasant farms, has recently emerged in response to popular demand for land.<sup>8</sup> In Kazakhstan, in particular after 1995, large private farms with long-term usufruct rights have also been formed (Gray 2000), while in Kyrgyzstan there is a tendency within the peasant farm sector to create new forms of association (see also box 2, the case study in Nookan, Djalal-Abad region). Finally, in response to stagnation and crisis during the late 1990s, many non-solvent farming enterprises were liquidated and land was sold or distributed.

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<sup>7</sup> *Nomenklatura* refers to a list of influential public positions that were filled by Communist Party appointees in the former USSR; it is also used to refer to the Soviet elite.

<sup>8</sup> Craumer 1995; Delehanty and Rasmussen 1995; Spoor 1995; Lerman et al. 1996.

### ***Household plot expansion***

As in the larger CIS countries, the decline in agriculture in Central Asia (and consequently the drop in wages) put pressure on farm workers in the large-scale farms to find extra income. Previously, *kolkhoz* and *sovkhoz* workers had a small subsidiary plot (also called household enterprise/plot or smallholding), which produced a substantial part of the household's cash income. Household production was restricted by the central authorities, as these plots were anathema to Soviet ideas of collective production. Between 0.2 and 2 per cent of farm land was set aside for household plots and gardens in the Central Asian SSRs (4 per cent in the FSU as a whole). These plots accounted for nearly 30 per cent of the total gross agricultural product in the Soviet Union (Turkmenistan was an exception, where plots accounted for only 16 per cent of total production) (Lerman et al. 2002).

In the post-1991 period, central restrictions on the size of household plots were lifted or relaxed. As a consequence, most farm workers enlarged their household plots. In Uzbekistan, for instance, the maximum size of plots was enlarged to 0.25 hectares of irrigated land and 0.5 hectares of non-irrigated land, up from 0.1 hectares in the communist period (Ilkhamov 1998:551). In the other Central Asian countries, the maximum limit on private plots was also generally enlarged to about 0.25 hectares. By the end of the 1990s the private plots' share of total land increased to from around 8 per cent to almost 16 per cent in almost all the countries (table 9). The only exception is Kazakhstan, where private plots occupy only 0.6 per cent: one reason for this low share is the low rural population density in relation to arable land in this country, which has further decreased following significant rural-urban migration in the 1990s.

Households tend to focus on livestock production and intensive crops like vegetables (and rice in irrigated areas). By 1995, plots in Uzbekistan, for instance, accounted for more than 75 per cent of total meat production and 80 per cent of milk (Ilkhamov 1998:551). In Kyrgyzstan nearly three-quarters of meat and milk production, and more than 60 per cent of wool came from household plots in 1996 (Mudahar 1998). Although reforms started later in Tajikistan, by 2001 the individual sector (of which household plots represent about half) produced 75 per cent of agricultural output (Lerman and Stanchin 2003:7), up from 50 per cent in 1997.

The large share of food produced on smallholdings is (and was) made possible by the symbiosis between the large-scale farm and the smallholdings. Household enterprises received support from the collective, including fodder for livestock, free use of machinery, and support with transportation and marketing of private produce. Such arrangements were also beneficial for the collective farm: their support for household plots was a way to improve workers' motivation for their low-paid work on the collective, and also allowed the manipulation of production figures to avoid excessive production quota.

In the 1990s this symbiotic relation between the large-scale farm and the private plots transformed into a parasitic one (Spoor and Visser 2001). The expanding household enterprises began to demand ever more resources from the large-scale farms. Often the farm management agreed to such support, as it served as a kind of compensation for wage arrears. It is still common practice for households to graze their livestock on the pastures of the (former) collective farm. Such arrangements are now, however, often to the detriment of the large-scale farm. In Uzbekistan, the increasingly frequent damage caused to collective farm crops by private cattle has become a serious problem (Ilkhamov 1998:552). The central government has passed several decrees to prevent crop damage. One decree even made provision for observation posts and mounted patrols in those areas more prone to crop damage. Such decrees testify to the indifference of farm workers, and often also farm managers, to collective property. Even if farm managers are dedicated to guarding farm property and controlling the use of collective land and resources, it is difficult to stop its degradation: for instance, when farm managers restrict the supply of fodder to households, it often leads to increased pilfering from farm stores at night by workers, as has been observed in some provinces of the Russian Federation (Visser 2003a).

Increased plot production has also been realized, thanks to the enormous investment of labour by women. In Central Asia (and in the rest of the former Soviet Union), work on the household plot is generally seen as being a part of household duties, and therefore traditionally female work. In the Soviet period, the increased participation of women in formal jobs did not coincide with an increased participation of men in household duties. Although in some cases the woman's contribution to providing a livelihood for the family is almost equal to the man's, the woman remains obliged to carry out duties pertaining to childcare, the household and the private plot.<sup>9</sup> Women often work on several plots, as Kandiyoti (2000) describes for an irrigated area in Uzbekistan: women grow vegetables for the family on the household plot, help their husbands on the leasehold plots (where rice is grown for cash), and at the same time work in the fields of the collective farm.<sup>10</sup>

In the most important irrigated areas, women's increased work on household plots has coincided with an increased feminization of labour on the farm enterprises (Kandiyoti 1999:513). Cotton picking, which is arduous, dirty and low-paid work, is traditionally done by women and children. Other manual work on farm enterprises is also increasingly carried out by women. Men tend to engage in more lucrative private farming (or contract/leasehold farming in Uzbekistan and Turkmenistan), in trade or in the better-paid jobs in agriculture (such as tractor driver). Women have largely lost their formal jobs outside of agriculture: many worked in the social sector, which has been hit particularly hard by economic decline and government cuts. As a consequence, one can observe a simultaneous intensification of women's labour input into a range of subsistence and informal activities and a decline in their wage-earning opportunities (Kandiyoti 1999:509).

Although the share of private plot production in total production increased throughout the Central Asian countryside in the early 1990s, the growth in private plot production has varied considerably since then. In Turkmenistan and Uzbekistan the (independent) private farming sector (to be distinguished from the private plots linked to the farm enterprises) is least developed. In these countries, where private farm formation is slow due to restrictive regulations and a centralized state order system, private plots have expanded most strongly. Authorities have facilitated this growth, as the private plots offer a social safety net for the rural population in a situation where the government budget for rural social infrastructure has been cut. In Uzbekistan the state uses contracting schemes between farm enterprises and household plots to tap into the productivity of the private plots. Nevertheless, as was discussed above, the productivity of private plots is often at the cost of the local farm enterprise's sustainability.

### ***Formation of "private" peasant farms***

Agrarian reform—in terms of the formation of private family farms—has made considerable progress in Kazakhstan and Kyrgyzstan, less in Uzbekistan, and very little in Turkmenistan. Since the peace agreement in Tajikistan in 1997, land reform has also been implemented in that country. However, land reform has more often than not taken the shape of nominal or cosmetic change, with state farms transformed into joint stock companies or cooperatives, and collectives becoming limited liability partnerships or leasehold companies. These changes mean nothing more than replacing the name plate above the main gate. Land in the CAS has also been privatized in different ways, which makes it difficult to assess what share of agricultural land is currently in private usufruct or *de jure* ownership (Lerman et al. 1996:165). The process of dividing up large farms and forming peasant farms has accelerated since the late 1990s, often in response to the enormous indebtedness of many post-collective enterprises.

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<sup>9</sup> The situation can change if the wife becomes the main breadwinner. In the Andijan region in Uzbekistan, men rarely go to market for fear of provocation and blackmail by police and custom officers. Women have taken over market trading as they are less prone to such provocation. In the women's absence, men perform duties previously regarded as the domain of their wives, like milking cows, taking care of children and cooking meals ("Expert" Centre for Social Research 1999:40).

<sup>10</sup> In non-irrigated areas with extensive crop production and livestock farming, where the demand for manual labour is limited, there is high female unemployment (Kandiyoti 2000).

## Kazakhstan

In Kazakhstan, agrarian reform has advanced considerably, but with many ups and downs. Previously, agricultural production had been dominated by more than 2,000 *sovkhosy*, with an exceptional average size of 80,000 hectares, and around 400 *kolkhozy* that were on average 10,000 hectares. Although initiated in the early 1990s, the privatization process progressed only gradually, with a renewed impetus for reform in 1994–1995. Initially, most privatization meant the establishment of joint stock companies with only internal stockholders (managers and workers), although the amount of land available for private use by households within these enterprises increased.

In a World Bank report (1994:39) it was observed that the “large inefficient” *sovkhosy* were simply transformed into “large inefficient” collective or cooperative farms. Quite a number of these enterprises still functioned under the same operational regime as before, albeit under a new name. Werner (1994) notes that there was even a tendency after the first reform wave (1992–1993) toward a neocollectivist policy, presenting potential obstacles to the formation of a viable private farm sector. This tendency was also noticeable during a research visit by the author to the rural areas of Djambul and Shymkent in southwestern Kazakhstan. In interviews with officials responsible for agriculture, “planning”, “procurement” and “control” were still the keywords of agricultural policy.<sup>11</sup> Nevertheless, since 1995 (and in particular since the start of 1997) the number of individual farms (mostly with lifelong usufruct rights) has increased rapidly, along with their average size, growing from 30,800 farms (covering 12.7 million hectares) in 1996 to 51,300 farms (27.8 million hectares) in 1998 (see table 4). With an average size of 542 hectares, it is difficult to call these farms “peasant” farms, although farms are generally much larger in Kazakhstan than in the other countries because of extensive animal husbandry (see table 4). These farms represented just over 10 per cent of the total agricultural area in 1997, which expanded to a quarter of agricultural acreage by the beginning of 2000. During the period 1999–2002 the number of private farms fluctuated substantially, with a downward trend in the total area, a growing number of farms, and a smaller average size. This is perhaps related to the introduction of a new bankruptcy law in 1998, and the better functioning of land markets.

**Table 4: Peasant farms in Kazakhstan, 1992–2002**

Year	Number of farms	Acreage (hectares)	Average size (hectares)	Percentage of agricultural land
1992	3,300	800,000	242	0.3
1993	9,300	4,900,000	527	2.4
1994	16,300	6,500,000	399	3.2
1995	22,500	7,800,000	347	3.9
1996	30,800	12,700,000	412	6.5
1997	42,500	20,000,000	471	11.0
1998	51,300	27,800,000	542	18.6
1999	85,400	22,500,000	263	17.3
2000	67,400	26,800,000	398	25.0
2001	76,400	22,400,000	293	24.0
2002	95,500	23,000,000	241	25.2

**Note:** Percentage of total agricultural land, data per 1 January. **Source:** StatKom SNG 1995, 1999, 2002; Spoor 1999.

## Kyrgyzstan

Land reform in Kyrgyzstan—although definitely conducted more rapidly and coherently than in the other Central Asian states—has also not occurred without contradictions. With a recent his-

<sup>11</sup> Author's field notes, Kazakhstan, September 1997.

tory of violent conflict between Kyrgyz and Uzbeks in the *oblast* of Osh,<sup>12</sup> land privatization contributed to further interethnic tension in 1992. 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 (mainly 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 disincentive for private farming.

In early 1994, at the same time as in Kazakhstan and Uzbekistan, the Kyrgyz government gave a new impulse to the reform process, reducing the procurement quota that private farms were obliged to sell to the state. Private farms were accorded usufruct rights on state-owned land for 49 years (extended to 99 years in 1995) (Delehanty and Rasmussen 1995). Private land titling became an issue of heated discussion in parliament over subsequent years. The land distribution and privatization programme fell exclusively into the hands of the Ministry of Agriculture, which established a National Land Fund that reserved 25 per cent of arable land for ethnic Kyrgyz farmers.<sup>13</sup>

There was rapid growth in the number of private peasant farms in Kyrgyzstan in the mid-1990s (see table 5), reaching 23,200 and covering 1,994,300 hectares in early 1996. This was already 26.6 per cent of the total agricultural area, and more than the total arable land area (table 9). According to official data, the number of farms had increased to 38,700 in 1998, but they covered a substantially lower acreage. It might be that part of this (reduced) area has been included in another category, the associations of peasant farms. Since the late 1990s, the peasant sector has grown in number of farms, but stabilized in acreage (see table 5). The case studies carried out for this paper, both in Chui valley and in the southern regions of Djalal-Abad and Osh, indicate that substantial changes have taken place, and although the collective farms are still important, reformed enterprises, peasant farms and household plot agriculture have become dominant. The two field reports indicate problems for private producers, although there are some successful enterprises (such as the peasant association in Nookan, Djalal-Abad, see section five).

**Table 5: Peasant farms in Kyrgyzstan, 1992–2002**

Year	Number of farms	Acreage (hectares)	Average size (hectares)	Percentage of agricultural land
1992	4,100	103,100	25	1.0
1993	8,600	374,800	44	3.8
1994	12,800	868,200	68	8.6
1995	17,300	744,000	43	7.8
1996	23,200	1,994,300	86	26.6
1997	31,000	1,494,700	48	22.3
1998	38,700	951,200	25	19.0
1999	49,300	974,700	20	21.2
2000	60,100	1,040,500	17	23.1
2001	71,200	1,117,800	16	23.3
2002	84,700	1,077,200	13	23.3

**Note:** Percentage of total agricultural land, data per 1 January. **Source:** StatKom SNG 1995, 1999, 2002; Spoor 1999.

<sup>12</sup> The Osh *oblast* in southwest Kyrgyzstan forms part of the Fergana valley and is inhabited by a majority of ethnic Uzbeks. In June 1990 ethnic tensions erupted in the city of Osh, with hundreds of people killed within a few weeks. Only the sending of a Russian regiment somewhat defused the tension (Author's field notes, Osh, October 1993).

<sup>13</sup> Until mid-1994 land privatization was jointly governed by the State Property Fund and the Ministry of Agriculture. The National Land Fund was formally abolished by the end of 1995.

## Tajikistan

In Tajikistan the process of land reform stagnated during the civil war (1992–1997), irrigation systems and farm assets were destroyed and supply networks broke down. Land reform picked up after peace was restored. According to the Asian Development Bank (2000), by the end of 1999 more than half of the state and collective farms had been dismantled. Land use by private farms was permitted in the form of lifelong inheritable holdings. Since the start of reform in 1997–1998, the number of individual farms has not grown substantially, but the total acreage has increased dramatically, from just over 3 per cent of agricultural land in 1998 to nearly 40 per cent in 2002 (see table 6). Tajikistan has gone further in just a few years than Uzbekistan and Turkmenistan have in a decade.

**Table 6: Peasant farms in Tajikistan, 1992–2002**

Year	Number of farms	Acreage (hectares)	Average size (hectares)	Percentage of agricultural land
1992	4	65	16	0.0
1993	4	100	25	0.0
1994	100	700	7	0.0
1995	200	9,000	45	0.2
1996	1,800	17,300	10	0.4
1997	2,400	64,200	27	1.5
1998	8,000	139,000	17	3.3
1999	10,200	287,500	28	7.0
2000	9,300	859,600	92	21.0
2001	12,300	1,395,500	113	34.0
2002	11,900	1,581,900	133	38.6

**Note:** Percentage of total agricultural land, data per 1 January. **Source:** StatKom SNG 1995, 1999, 2002; Spoor 1999.

## Turkmenistan

Turkmenistan, the slowest reformer in terms of macroeconomic policy, has also been extremely cautious in restructuring the agricultural sector. Although it is the only Central Asian country in which private property appears in the constitution, in practice privatization and farm restructuring have been very limited. Apart from the household plots, of which the acreage expanded gradually during the 1990s, some private farms have been emerging based on leasehold or owned outright. This privatization is, however, less real than it seems, since much of the produce of the leasehold plots and private farmers could still only be sold through the omnipotent state order system (see also section four). Private farmers have little freedom to change the crop mix, while many prices continue to be administratively controlled. Nevertheless, as Lerman and Brooks (2001) note, private farmers expect that within a limited period of time they will gain full ownership of their farms, though at the end of the 1990s there had been no further progress in this respect.

In 2002 there were 5,200 private farms with on average about 20 hectares of predominantly non-irrigated land (Lerman and Stanchin 2003:1). This figure is very low compared with the neighbouring countries, but the amount of land taken up by private farms is now catching up with the total land constituting household plots. Ten per cent of agricultural land is now used by private farms and household plots (Lerman and Stanchin 2003:1).

The collective farms, occupying the majority of land, were transformed into peasant associations, which for many years merely meant changing the name plate. Since 1996–1997 Turkmenistan seems to have moved toward more genuine structural change, following Uzbekistan by introducing leasehold arrangements for households within the peasant associations. Households can lease irrigated plots of about five to six hectares, and are allowed to sell the produce independently of the association, which is what most households do (Lerman and Stanchin 2003:2).

**Table 7: Individual land use in Turkmenistan, 1991–1998**  
*(thousands of hectares)*

Year	Private farms	Household plots	Total individual use
1991	0.1	88.4	93.0
1992	1.8	101.5	108.7
1993	31.1	109.9	146.7
1994	87.3	117.8	210.9
1995	98.0	119.6	224.0
1996	105.5	114.4	225.0
1997	109.6	128.8	243.3
1998	116.1	131.1	252.2

Source: Lerman and Brooks 2001:17.

#### Uzbekistan

In Uzbekistan in 1993 nearly all *sovkhozy* were transformed into joint stock companies, and some were divided up into a number of collectives (Khan 1996). However, the formation of a new private farm sector remained incipient (see table 8). Since February 1994, supported by a number of presidential decrees on private property and entrepreneurship, land has been distributed (in fact, 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 per head—to promote the emergence of viable peasant farms (Republic of Uzbekistan 1994:77, 90). Another 100,000 hectares were reserved for distribution in 1994 for the same purpose. Interestingly, in one of its decrees, the government of Uzbekistan revealed self-criticism regarding economic reform in rural areas, describing it as “extremely slow and superficial” (Republic of Uzbekistan 1994:83).

**Table 8: Peasant farms in Uzbekistan, 1992–2002**

Year	Number of farms	Acreage (hectares)	Average size (hectares)	Percentage of agricultural land
1992	1,900	13,700	7	0.0
1993	5,900	45,100	8	0.2
1994	7,500	70,600	9	0.3
1995	14,200	193,100	14	0.8
1996	18,100	264,600	15	1.1
1997	18,800	351,600	19	1.5
1998	21,400	413,300	19	2.1
1999	23,000	446,500	19	2.2
2000	31,100	665,700	21	3.2
2001	43,800	889,700	20	4.4
2002	55,400	1,054,700	19	5.2

**Note:** Percentage of total agricultural land, data per 1 January. **Source:** StatKom SNG 1995, 1999, 2002; Spoor 1999.

In November 1994 a field visit by the author to an area near Tashkent confirmed that implementation of these decrees had started, with farmers obtaining 10–20 hectares of land each. By 1999 it was estimated that there were nearly 23,000 peasant farms, with an average land holding of 19 hectares. However, the system of allotting land through governors and mayors has meant that vested private interests in the public sector promote the privatization of land to the benefit of the rural *nomenklatura*. Land ownership remains a state monopoly, and 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 and grain) to the state at “negotiated” (below market) prices, while their inputs come from the former *kolkhozy* (now called *shirkats*). Since 1998, there has been a move toward sanation<sup>14</sup> (or liquidation) of non-profitable *shirkats*. This explains the rapid recent growth of private peasant farms in Uzbekistan, after years without substantial private farm formation (Kandiyoti 2003).

In conclusion, during the 1990s there was first a very gradual transformation of tenure systems, as land reform progressed only gradually in most countries. After the middle of the decade, Kazakhstan and, especially, Kyrgyzstan progressed much farther (see table 9, which compares the arable land held by households—as subsidiary plots—and peasant farms with total arable land in the Central Asian states). Kyrgyzstan stands out as more than half of its arable land is in the hands of households or private farmers. Nevertheless, this means that a large proportion of land is still held by other farm types, which in the case of Turkmenistan and Uzbekistan, means the collective farms or their successors (Lerman and Brooks 2001; Kandiyoti 2003).

<sup>14</sup> “Sanation” consisted of a two-year pre-bankruptcy process that aimed to re-establish the creditworthiness and economic viability of an enterprise.

**Table 9: Arable land in household plots and peasant farms, 1994–1999**

		Household plots			Private peasant farms			Total percentage of arable land
		Agricultural land	Arable land	Percentage of arable land	Agricultural land	Arable land	Percentage of arable land	
Kazakhstan	1994	287,100	180,300	0.5	6,500,000	800,000	2.4	2.9
	1999	189,300	127,500	0.6	27,800,000	3,900,000	17.1	17.7
Kyrgyzstan	1994	129,300	98,700	7.6	868,200	200,000	15.4	23.0
	1999	140,000	107,000	8.9	974,700	598,000	49.8	58.7
Tajikistan	1994	75,200	50,100	6.3	9,000	1,400	0.2	6.5
	1999	164,900	109,860	15.7	287,500	61,200	8.7	24.4
Turkmenistan	1994	117,800	94,000 <sup>b</sup>	7.4 <sup>c</sup>	87,300	30,000 <sup>b</sup>	1.9 <sup>c</sup>	9.3 <sup>d</sup>
	1998	131,100	104,880 <sup>b</sup>	8.2 <sup>c</sup>	116,100	50,000 <sup>b</sup>	3.2 <sup>c</sup>	11.4 <sup>d</sup>
Uzbekistan	1994	428,500 <sup>a</sup>	360,500	8.8	149,900 <sup>d</sup>	82,900	2.0	10.8
	1999	541,000	455,150	11.4	268,000 <sup>d</sup>	148,210	3.7	15.1

<sup>a</sup> The source for this also quotes the figure 491,000. <sup>b</sup> Calculations based on Lerman and Stanchin (2003); Lerman and Brooks (2001:117); and Statkom SNG (1995, 1999). <sup>c</sup> Data on Turkmenistan are not very clear and should be regarded as an indication. <sup>d</sup> The source for this also provides different data, namely 193,100 (1994) and 446,500 (1999)—the differences remain unexplained. **Source:** StatKom SNG 1995, 1999.

In Kazakhstan, a greater variety of farm structures exists, including those owned by investors, after the implementation of bankruptcy laws in the late 1990s (Gray 2000). In all cases, household production has remained important, and has even grown in comparison with the Soviet era.

#### IV. Market Reforms, Transformation and Agricultural Performance

The economic crisis that struck in the first half of the 1990s affected agricultural sector performance in the CAS in a similar manner as other parts of the FSU. The reasons for this crisis were not the same everywhere. In countries where land reform and farm restructuring took place at an early stage, such as Kazakhstan and Kyrgyzstan, stagnation in the large farm enterprise sector originated in the disintegration of many of the forward and backward linkages. It seems too that input markets were liberalized relatively rapidly, while the state order system for the main crops of cotton and wheat remained in force longer, which meant that the terms of trade for agriculture worsened. In Turkmenistan and Uzbekistan, the decrease in agricultural production was far less noticeable, in part because the Soviet system remained largely intact, and the only reforms implemented were the introduction of leaseholds, the contracting of production to families, and the decentralization of management within the large farms. The system of subsidized inputs and the taxation of production through the state order system remained in force to varying degrees.

Toward the end of the 1990s, further reform was undertaken in Kazakhstan (1998), Tajikistan (1998) and Uzbekistan (1998–1999), particularly in relation to the restructuring of many heavily indebted collective farms (or their heirs, such as the *shirkats* or production cooperatives).

**Table 10: Reform index (land reform and agricultural sector restructuring), 2001**

	Price and market	Land reform	Agro-processing	Rural finance	Institutions	Total mean score
Kazakhstan	6	5	7	6	5	5.8
Kyrgyzstan	7	7	6	6	5	6.2
Tajikistan	6	6	5	3	4	4.8
Turkmenistan	2	3	2	1	2	2.0
Uzbekistan	4	4	4	2	3	3.4

Source: EBRD 2002:78.

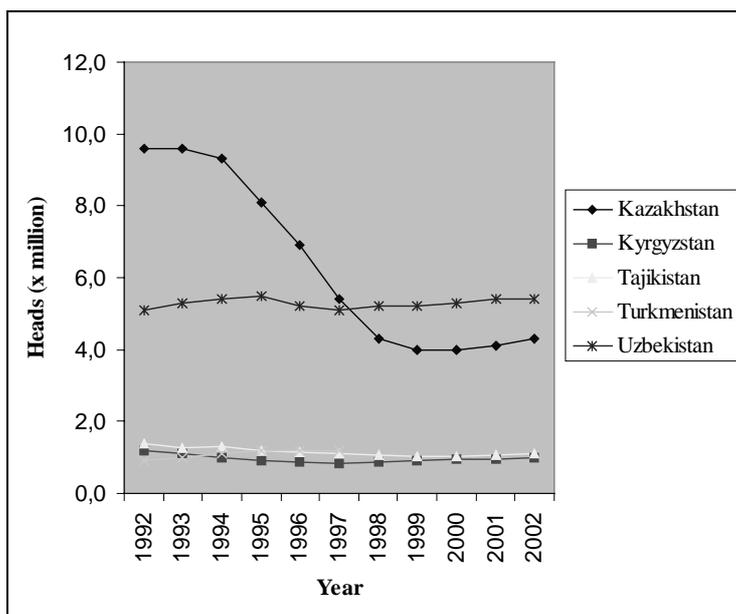
In terms of reform indicators, it can be seen that Kyrgyzstan and Kazakhstan are indeed furthest along in their transformation. This is also the case in a more comprehensive picture of reform, taking market structures, institutions, agroprocessing and rural finance into account (table 10). Turkmenistan and Uzbekistan are substantially less reformed when compared with the two “leaders”, while Tajikistan is catching up.

How does reform relate to performance, given that it is undertaken to improve economic efficiency and allocation of resources, and expand production? Before trying to show any form of correlation (which is difficult, see Spoor and Visser 2001), and acknowledging that in view of missing markets and institutions, and existing market failures, the influence of reform on performance might well prove contradictory to economic theory, we will first investigate the main statistical trends in agricultural production in Central Asia.

Three main trends stand out, all having significance in terms of rural livelihood, equity and income. First, there has been a decline in the extensive livestock system. This system was run by specialized state livestock farms, supported by the planned delivery of fodder. Early on in the decade of transition, fodder production (and coarse grains in general) was drastically reduced in favour of wheat. In some cases, this was because of relative price development and the attractiveness of producing wheat, which guaranteed food self-sufficiency.

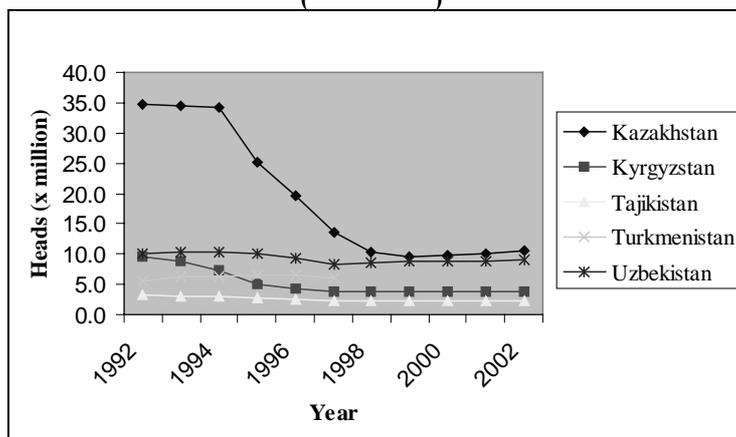
Turkmenistan and Uzbekistan decided to promote food self-sufficiency as part of a strategy of economic nationalism. Livestock was mostly privatized and fell largely to households. For example, in Uzbekistan 90 per cent of cattle (92 per cent of cows) are in private hands, and 70 per cent of sheep and goats. In Kazakhstan and Kyrgyzstan, these percentages are somewhat higher (StatKom SNG 2002). As the countries had limited land resources, and no possible substitutes for the previously available fodder crops, there was a tendency to reduce the herd (see figures 2 and 3). This reduction in cattle, sheep and goats, however, had a very positive impact on the land, as overgrazing had been a serious problem in the past. In economic terms, an adjustment toward greater efficiency has taken place, although there may have been some overshooting. Finally, the poultry population was reduced to around a third of the level of the 1980s, while in some countries, possibly because of religious revival, pig production nearly disappeared (StatKom SNG 2002).

**Figure 2: Cattle in Central Asia, 1992–2002**



Source: StatKom 1995, 1999, 2002.

**Figure 3: Sheep and goats in Central Asia, 1992–2002**



Source: StatKom 1995, 1999, 2002.

Second, and indirectly related to the former trend because of its connection to livestock production, there has been a major shift in cereal production, away from coarse grains and fodder crops and toward the production of wheat for human consumption. It is noted in table 11 that the difference between cereal and wheat production decreased during the 1990s.

**Table 11: Cereal production in the Central Asian states, 1992–2001**  
(millions of tonnes)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
<b>Kazakhstan</b>										
Cereals	29,649	21,533	16,375	9,476	11,210	12,359	6,380	14,248	11,547	15,900
Wheat	18,285	11,585	9,052	6,490	7,678	8,955	4,746	11,242	9,074	12,910
Rice	467	403	283	184	226	255	236	199	214	300
<b>Kyrgyzstan</b>										
Cereals	1,603	1,597	1,065	1,045	1,407	1,615	1,608	1,617	1,550	1,804
Wheat	679	885	608	701	1,040	1,274	1,204	1,109	1,039	1,315
Rice	4	3	4	8	11	12	11	15	19	8
<b>Tajikistan</b>										
Cereals	276	258	250	249	548	559	500	475	359	316
Wheat	170	159	182	174	400	452	388	368	283	233
Rice	20	23	20	24	21	44	40	38	20	25
<b>Turkmenistan</b>										
Cereals	732	1,009	1,120	1,102	545	759	1,278	1,567	1,208	1,299
Wheat	377	509	675	695	453	707	1,245	1,506	1,150	1,200
Rice	64	88	92	79	41	27	14	33	27	34
<b>Uzbekistan</b>										
Cereals	2,178	2,165	2,502	3,223	3,558	3,768	4,132	4,304	3,916	3,502
Wheat	964	876	1,362	2,347	2,742	3,073	3,556	3,602	3,522	3,127
Rice	539	545	498	328	450	389	346	421	155	178

Source: FAO statistical database 2002, <http://faostat.fao.org>; some corrections were made for 2001, using StatKom SNG (2002).

The movement toward wheat production in Turkmenistan and Uzbekistan largely accounts for the reduction in fodder crops, and only in part explains the reduction of the cotton acreage. As cotton yields stagnated or diminished, cotton output shows an overall fluctuation, and in some cases a decline, during the 1990s (table 12). This damaged exports, which are particularly important for Tajikistan, Turkmenistan and Uzbekistan.

**Table 12: Cotton production in the Central Asian states, 1992–2001**  
(millions of tonnes)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Kazakhstan	246	198	208	223	183	198	162	249	287	420
Kyrgyzstan	52	49	54	75	73	62	78	87	88	86
Tajikistan	513	524	531	412	318	353	384	316	335	453
Turkmenistan	1,290	1,341	1,283	1,293	436	635	707	1,300	1,030	1,800
Uzbekistan	4,129	4,235	3,936	3,934	3,350	3,639	3,206	3,600	3,006	3,300

Source: FAO statistical database 2002, <http://faostat.fao.org>.

Third, there is an important trend revealing a higher degree of individualization of production than land privatization might indicate (Lerman 2003). Under the Soviet regime, households already produced a large share of potatoes, milk, eggs and vegetables on their subsidiary household plots, as discussed earlier. The share of household plot and (to a lesser extent) peasant

farm production of these commodities increased rapidly during the first half of the 1990s. Table 13 shows the substantial growth of wheat output in the individual sector.

**Table 13: Private (household and peasant farm) share  
in wheat output, 1991–2001** (*per cent*)

	1991	1992	1994	1995	1996	1997	1998	1999	2000	2001
Kazakhstan	1	2	3	4	9	17	29	29	38	42
Kyrgyzstan	5	10	18	38	51	58	64	68	76	78
Tajikistan	4	5	7	6	47	44	50	57	60	70
Uzbekistan	9	9	11	15	18	17	26	28	—	—

Source: StatKom SNG 1999, 2002.

The only two main crops still produced primarily by large agricultural enterprises during the 1990s were cotton and grain (subject to the state order system). For the former this is still the case, because production is dominated by Turkmenistan and Uzbekistan; for the latter, this does still apply to Kyrgyzstan, but not to Kazakhstan (the main wheat producer in Central Asia).

### ***Reform of the state order system***

In the Soviet era, all support services for agricultural production, such as input distribution, agroprocessing and trade, were closely linked to the state order system. Three types of reform of the state order system can be distinguished in Central Asia, based on the cases of Kazakhstan, Kyrgyzstan and Uzbekistan.

#### **Kazakhstan**

In Kazakhstan the government primarily took a gradualist approach toward 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 around 4.1 million tonnes of grain under compulsory procurement arrangements (Liefert 1995:14). Since then, however, procurement arrangements have been somewhat relaxed (and eliminated for non-grain crops), and in 1995 a system of state procurement based on a competitive tender system was introduced.

During 1994–1995, 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 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. By the late 1990s, the state order system had largely been eliminated. Nevertheless, agricultural markets are still fragmented and inefficient and in some cases state monopolies have simply been transformed into private monopolies.

#### **Kyrgyzstan**

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 domestic producers prices far below international market levels. In early 1994, after a new wave of market reforms was initiated, compulsory 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, remained and prices were negotiated. Most minimum shares of output to be sold to the state were established at between 20 and 30 per cent (except for tobacco, for which this share was substantially higher). There was sometimes a lack of real understanding by the leadership of how markets

should work after 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 in adjusting to the needs of the emerging private small farm sector. On the other hand, privatization of the huge parastatals (as executed in both Kazakhstan and Kyrgyzstan) was a complex matter, as most were formally bankrupt. The absence of outlets offering competitive prices, either for domestically traded food crops or for exports, still results in net transfers out of agriculture, which has negative consequences for agricultural production. This is particularly the case in the dairy sector, which suffered a drastic reduction in milk production in 1993–1994. As farmers saw the price of silage rising, they slaughtered their milk cows to concentrate on meat production. The reduced production and disarticulation of the marketing system was subsequently felt by the agroprocessing sector. A milk factory 30 kilometres from Bishkek with a daily capacity of 50 tonnes of raw milk, when visited by the author in early December 1994, received only five tonnes. Lacking credit and transport facilities, it could not compete with the emerging street market in fresh milk on the outskirts of the capital.<sup>15</sup> As in the case of Kazakhstan, the state order system disappeared in the late 1990s, when input and output markets were liberalized.

### Uzbekistan

In Uzbekistan the state order system is still partially intact, although its intervention in the output of agricultural commodities has diminished in recent years to a small number of agricultural products such as cotton and grain (which are nevertheless dominant in the agricultural sector). The procurement quota, or the share of the harvest that has to be sold by farmers to the state, has 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 have since been introduced, bringing it down to 35 per cent (Spoor 2002), although most cotton is still sold through state channels, in part at negotiated prices. 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 control over agricultural markets in Uzbekistan is still quite extensive.

The terms of trade for agricultural producers on average have not improved. High 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.<sup>16</sup> Even “free market” prices for non-quota production are lower than international prices, mainly because the export of cotton is still a quasi-state monopoly. With an exchange rate lower than purchasing power parity this is not surprising, but even with low input prices there is a substantial net outflow of resources from agriculture, estimated in 1995 at \$0.9–\$1.2 billion for Uzbekistan (IMF 1998:53). However, since then, procurement prices have been substantially raised and a tendering system introduced for above-quota sales. In the following two years (1996–1997) transfer out of agriculture dropped to between \$250 and \$550 million.<sup>17</sup>

Since the mid-1990s there has been a complex trade licensing system, which is open to corruption. In practice it is still relatively difficult for a private company to enter the export market (except those with sufficient “political capital”), and state companies often remain the 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 on the world market, and is doing so quite successfully.

In summary, the state order system is still partially in force in Uzbekistan, and even more so in Turkmenistan, and has been practically broken down in Kyrgyzstan and Kazakhstan, and most recently in Tajikistan. In all cases the newly emerging small private farmers and reformed

<sup>15</sup> Author's field notes, Chui valley, 1994.

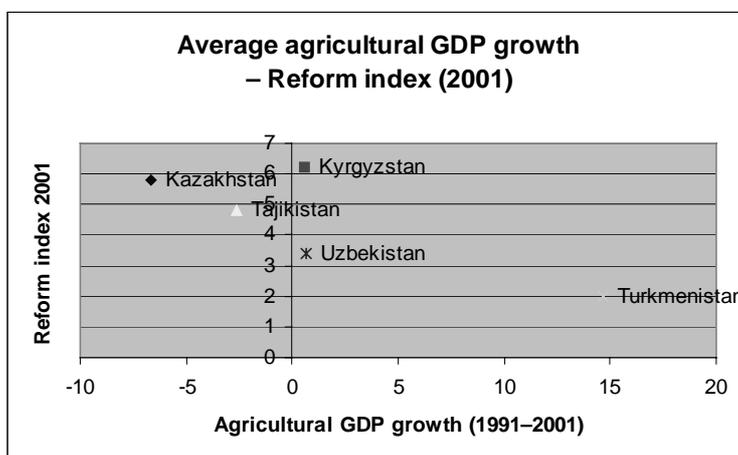
<sup>16</sup> It is somewhat difficult in this case to equalize border prices with world market prices. First, the quality of Uzbekistan cotton is relatively low. Second, most of it is still sold in the captive markets of the FSU, often in barter agreements.

<sup>17</sup> At the official auction rate it is even below \$100 million. The International Monetary Fund (IMF) uses hypothetical commercial rates for its estimates.

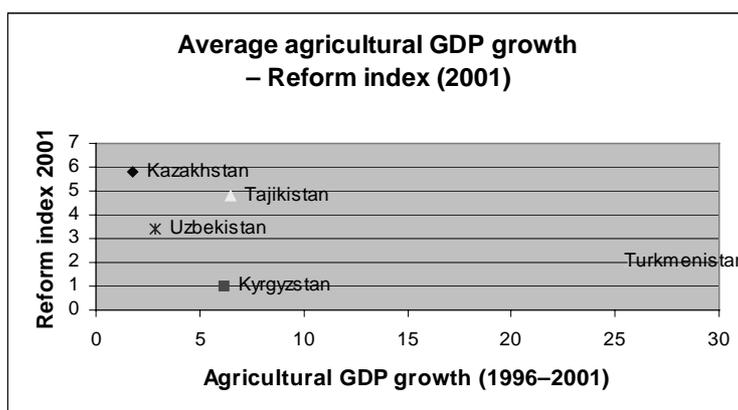
agricultural enterprises still face significant obstacles as they operate in monopolistic, sometimes segmented, and often non-existing markets. Where transfers through the pricing system provide disincentives to producers (whether private or collective), the absence of accessible and competitive marketing channels and manufactured products that can be bought with income is also felt.

The rapid manner in which input markets were liberalized while the state order system was still partly in force and alternative marketing systems were still underdeveloped caused a slow recovery of agricultural output, in particular in Kazakhstan and Kyrgyzstan. There is also no direct relationship between the World Bank “agrarian reform” indicator for 2001 presented earlier and agricultural performance, measured in the growth of agricultural sector GDP: this can be seen in figure 4. However, if one limits growth to the 1996–2001 period, in which most countries saw a recovery (except Uzbekistan and Turkmenistan, which suffered from extreme drought and lost harvests) (Spoor 2000), then a positive correlation can be shown between the reform indicator and agricultural sector growth, particularly in Kyrgyzstan and Tajikistan (figure 4).

**Figure 4: Agricultural growth versus reform index**



Source: StatKom SNG 1995, 1999, 2002; EBRD 2002:78.



Source: StatKom SNG 1995, 1999, 2002; EBRD 2002:78.

## V. Agrarian Change, Increased Inequality and Civil Society

As has been discussed above, land reform in Central Asia has varied. Kyrgyzstan has developed a large peasant farm sector, now covering more than half the arable land resources. In Kazakhstan, particularly since 1998, a rapid restructuring of large non-viable farms has taken place, leading to the division of land into smaller units, to the typical management buy-out in which the manager bought the large farm, or to the sale of farms to investors or agro-industrial companies (Gray 2000). In Uzbekistan the *kolkhozy* (now *shirkats*) remained largely intact until the end of the 1990s. Only then was a rapid process of financial restructuring (sanation) initiated. This resulted in the splitting up of land into smaller peasant farms, and the sector has since grown rapidly. In Turkmenistan—at the other end of the reform spectrum—the only real development has been that of leasehold systems within the contours of the collective and state farms; from this, a relatively small “private” peasant farm sector has developed, with the peasants holding land in lifelong usufruct and leasehold (Lerman and Brooks 2001). Land reform is largely based on efficiency criteria, promoting investment by individual operators, letting them decide on their crop-mix depending on relative prices and other market signals. It is therefore assumed that smaller farm units produce at greater efficiency and with higher labour productivity than the previous large *kolkhoz* farms. Nonetheless, apart from being questionable in a context of missing markets and institutions, these presumptions underlying land reform should also be analysed from a perspective of equity and—as was stated in the introduction—the role of tenure systems and institutions in the social fabric of rural areas.

### *Kazakhstan*

In Kazakhstan, the first wave of land reform of the mid-1990s was badly prepared, and the precise choices available were known only to the rural elite, the managers of the *kolkhozy* and *sovkhozy*, and other powerful local figures. In large farms where land shares were distributed, fertile land and machinery assets fell into the hands of a few, while many *kolkhozniki* (*kolkhoz* workers) found themselves with marginal land, far from the village and often without water and other inputs.<sup>18</sup>

In the second wave of reform, initiated by the bankruptcy law of 1998, many insolvent large-scale farms were sold and sometimes split up. The operation brought “substantial changes in farm ownership and management that promise to lead to improved farm efficiency”:

However, the way in which the process was implemented raises serious concern about equity, as ownership is increasingly being concentrated in the hands of a few dominant individuals, and the welfare of farm workers who have lost their ownership shares and possibly their jobs in the process (Gray 2000:v).

In Kazakhstan many serious problems have occurred during land reform and farm restructuring (Gray 2000). In the more densely populated south and southwest, where most of the ethnic Kazakh population lives, land reform and the impact of macroeconomic transition (price liberalization and elimination of subsidies) were visible during field visits (box 1).

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<sup>18</sup> Author's field notes, visit to Djambul, 1997.

### **Box 1: Field visit to Djambul *oblast*, southwest Kazakhstan – Painful farm restructuring**

The *sovkhaz* of the village Rovnoe near Djambul originally had 1,630 workers, of which a number left with their land shares (200 workers with 800 hectares). In the end only 400 workers, with 3,500 hectares, established a new cooperative, inheriting all the equipment (such as combines and tractors), but also all the financial debts of the former *sovkhaz*. There are 1,500 hectares of grain (500 hectares is maize), 150 hectares of onions, 50 hectares of potatoes, 30 hectares of vegetables and 25 hectares of sugar beet. Around 1,000 hectares is covered with alfalfa and fodder grasses. It has around 1,000 cows—500 are milk cows (250 in production), 200 horses, and 4,000 square metres of greenhouses for vegetables. The workers spoke enthusiastically about Dutch seed potatoes (it had been suggested that my visit could lead to investment in this enterprise!) and a sprinkler irrigation project using Israeli technology and Dutch equipment, which has improved yield from 14 centners [1 centner equals 50 kilograms] per hectare to 35 centners per hectare. At the end of our conversation, which took place in the traditional setting of the large old central building of the *sovkhaz* and an office of which there are thousands of others in the FSU, it was confessed that the potato project had only functioned for one year because they have not been able to buy new seed potatoes (which revealed something about cash flow).

Contracts are agreed with the 400 workers, who are now members of the cooperative, and payments are made in the form of a dividend, which is 20 per cent of the profit. The manager, Kaliev Barbol, was very definite about preserving the current assets of the cooperative, such as the machine park (which was not in a very good state, but is at least still there, whereas in many other cases it has been sold or divided between the director and deputy director before privatization, as Barbol told me later). Although the cooperative currently produces milk at a loss, it wants to keep the cows so it can make profits when the market offers better prices.

There are many problems. Gas from Uzbekistan has become very expensive, and it is estimated that energy costs currently account for 75–80 per cent of the cost of vegetables produced in greenhouses. The former *sovkhaz* produced around 10–12 tonnes of milk per day in 1991–1992, now they have around 1.2 tonnes (each cow producing an average of 6 litres). According to the manager, the cooperative has no money and the members no salary (this is often confused with the term dividend) or pension, and the cooperative has large financial debts (both old and new). It cannot obtain credit (interest rates are estimated at 35 per cent) for working capital or investment because of non-solvency. In the past two years, almost 50 per cent of the profits came from vegetables, because in the greenhouses two harvests were possible, but this is now difficult because of the energy supply problems.

The visit to the greenhouse complex was like a hallucination. Received by a drunk operator, we visited the terrain, where the first block of greenhouses had been destroyed by earthquake some years ago (but never dismantled) and the other block was completely damaged and rusted, as it had not been used since the energy supplies stopped nine months ago. The picture was completed by an old energy plant, guarded only by a young Russian woman living in very poor conditions, and a processing plant that also seemed deserted. All assets were still there, but investors' hesitation was understandable, as the necessary replacement investments would be enormous. In the final analysis, it would probably be better to concentrate on wheat, meat, potato and possibly milk production, with summer production of vegetables, and let the rest drop. In any case, it was a depressing visit.

**Source:** Author's field notes, Kazakhstan, September 1997.

### **Kyrgyzstan**

A somewhat more organized land reform took place in Kyrgyzstan where, during the 1990s, many peasant farms, peasant associations and limited liability partnerships were established. As markets were still incipient or "missing", the new farm types found themselves in a very inhospitable environment, in particular because it became difficult to obtain inputs, credit and output outlets. The credit bottleneck was dire, despite rural credit programmes, such as through the Kyrgyz Agricultural Finance Corporation.

In Kyrgyzstan land reform was complicated by interethnic tensions that emerged in 1990, when bloody clashes resulted in hundreds of deaths in the southern *oblasts* of Osh and Djalal-Abad. While the country was at first the most advanced in building land markets and full transferability of land rights, it soon declared a five-year moratorium on land sales, in part because of the sensitivity of the issue. There was a fear that Kyrgyz land would be bought up by more entrepreneurial Uzbek farmers, in particular in the cotton sector. In the cotton-producing areas of southwest Kyrgyzstan, new forms of cooperation have been established. A successful case was visited in the Nooken *raion* of Djalal-Abad *oblast* during field research in autumn 1997 (see box 2). This peasant association was based on the cooperation of 18 members of an extended family, with a very dynamic, well-connected leader being possibly the most important factor in their success. In northeast Kyrgyzstan many problems were encountered after the waves of land reform. Lack of credit proved a crucial obstacle, but the dramatic crisis in the animal husbandry sector was also noticeable (see box 3). Here, farmers saw growing inequality and land concentration, and reduced income, as the main problems of the agrarian transformation.

### **Box 2: Field visit to Nooken *raion*, Djalal-Abad *oblast*, Kyrgyzstan – Relative success**

In the Nooken *raion* we were received by Omarzak Barakanov, a graduate of Moscow's Timiryasev Agrarian Academy, who showed us around. Nooken has eight rural village administrations, and the total amount of land is 23,000 hectares (of which 18,000 hectares are irrigated). The *raion* is actually crossed by the Djalal-Abad road to the north, which is good for communication. The area is divided into agroclimatical zones, and Barakanov took me to Zone 3, where cotton, grain and tobacco were cultivated. There were brick houses, with heating, along the roadside, showing that this sub-*raion* was doing reasonably well. Passing through the village of Shaidan, where the former Leninjol *kolkhoz* was located, we visited a peasant association (PA) Darga (which is the name of a clan or extended family, to which most of the PA members belong). The PA was led by Kapar Kurbanov, a well-to-do farmer entrepreneur who came back to the farm shortly after I arrived. The PA has 100 hectares, with 20 hectares for cotton and 50 for wheat and other crops. They practice crop rotation, not using alfalfa ("what do we need that for?") but feedgrains such as corn. The PA has also started to produce cotton using Chinese technology (where separate plants are under plastic, with a small irrigation system around each plant), which will increase yield from 25 to 45 centners per hectare. Last year the PA even produced 68 centners per hectare of wheat.

The PA had bought elite seeds in Bishkek just before our visit. Kurbanov will try to reproduce the elite seeds and sell them to other farmers. It seems that this PA is a success story. It was the first PA in Kyrgyzstan, starting in 1991, and is now able to stand on its own feet. It has 100 hectares with only 18 families as members. Quite a lot of people would like to join, but as the PA has already accumulated substantial capital (tractor, combine for wheat harvesting, compressor, a new storage and administration building, bus, etc.), it will make a separate charter for new members who bring only land to the association. Nobody has yet left the PA, but there is a charter that regulates the departure of an original member, who can claim a share of the capital assets, to be paid in cash. The cotton field has been practically divided among the families: all have small plots, the exact size of which depends on family size. With the wheat harvest, each family member gets 250 kilograms of wheat (which can therefore go up to 2,500 kilograms for a family of 10). Apart from the crops each family has on average two cows, one horse, ten sheep, and earns 15,000 som (equivalent of \$750) per year, with 60–70 litres of cotton seed oil. It is clear that this PA is quite well-to-do. Mr. Kurbanov stated that the PA feels very lucky to have started so early. The PA members' mentality has changed: nobody controls them any more, and each family works for itself. The leader still registers the buying of seeds with the village administration, and promises that he will sell seeds to other farmers next year. The area of land per family is sufficient, though it only requires two people to work it, which means that children normally go to school. According to Kurbanov, new schools have actually been built, and the PA pays taxes (on the rented "land fund" lands, and normal taxes), from which these facilities, previously provided by the *kolkhoz*, are financed.

**Source:** Author's field notes, Kyrgyzstan/Uzbekistan, September 1997.

### Box 3: Field visit to Keminskaya *raion*, northeast Kyrgyzstan – Peasant association develops

There were (in late 1997) 4,905 individual farming families in total, and around 617 peasant associations (PAs) following various waves of reform in Kemin, according to Moris Alinbekov, head of the Land Resource Management Department of the *raion* administration. There are 61 mini-dairy farms (of eight to 50 cows) and seven cooperatives (five joint stock companies and two collective farms). Five (cooperative) technical service stations provide services to the farmers and PAs, which have to pay for them. According to Alinbekov, the producers' mentality has definitely changed: they have become interested in farming. The first reforms began in 1990, and the first experiments with private farms started in Kzyl Su (Kemin). By 1994 many people wanted land, and the government decreed that 25 per cent of land should be reserved in a land fund, while the other 75 per cent could be distributed. Those who had already received land in the early stages were again affected in this second wave of reform. All workers and their family members (born before the decree) received 0.4–1.0 hectares of land, depending on local availability. The quality of land was only accounted for in establishing the rate of land tax. At first, in 1994, peasant associations and cooperative farms were established, but since then people have preferred to separate and become individual farmers.

The agricultural marketing channels in Keminskaya *raion* still present serious problems. The government has not provided any credit to buy fertilizers, and as there is only a tiny private trade channel for imported fertilizers, few are used. Phosphorus and potash are not applied, so the quality of the soil is rapidly diminishing. Before 1991, Kemin used about 22,000 tonnes of fertilizers a year. In 1996 this fell to 900 tonnes, and in 1997 the regional administration obtained only 120 tonnes of nitrogen fertilizer on credit from the state. The situation is similar in the case of pesticides.

In 1996 the price of wheat was high. Around 30 per cent of 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 natural gas. Peasants often need money to pay off debts, and therefore make only small profits. There are dynamics of production in the agricultural sector, according to Alinbekov, but with small farms of three to five hectares, crop rotation is impossible, and the future difficult. At first the peasants separated from the farm enterprises, and now they were expected to cooperate with each other again. For a rational use of land, a minimum farm size of around 50 hectares is necessary. Next year, when the market in usufruct rights starts to function, land may be further concentrated. Production is growing thanks to more efficient land use. In animal husbandry, however, the situation is different. Kemin used to have 310,000 heads of sheep (1990), now there are no more than 29,000. This is because of low meat and wool prices and the very high cost of inputs, which means animal husbandry is no longer profitable. Sheep were basically kept 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 about the social situation in comparison with previous times, Alinbekov answered with a deep sigh, "What can I say about it?" Some farmers have become rich, but on the whole the living standards have declined.

**Source:** Author's field notes, Kyrgyzstan, September 1997.

### ***Uzbekistan***

In Uzbekistan, only a relatively small group of peasant farms was formed by the mid-1990s, because of its more gradual reform process. Many of these farms were still within the contours of the *shirkats*, dependent on their managers for inputs, and incorporated in the state order system for cotton and wheat (a situation that continues). However, some of these peasant farmers have done quite well, benefiting from very low land rents and being able to pay substantially higher wages than those received by *shirkat* workers.

The case study of a well-off farmer in Namangan *oblast*, a region known for widespread rural poverty, is of course not representative, but shows some interesting aspects (see box 4). This model farmer was clearly able to take an early initiative and do well, even providing secure employment and paying higher wages than the surrounding *shirkats*.

**Box 4: Field visit to Namangan *oblast*,  
Fergana valley, Uzbekistan**

On the outskirts of Namangan city, in the heart of the densely populated Fergana valley of Uzbekistan, we visited what can be called a “model farm”, the Chogdol Baraka peasant farm. Started in 1994, it is one of the earlier established private peasant farms. The owner received us with traditional Uzbek bread and green tea in the shade of a tree in his orchard. He was lucky, because he benefited from the galloping inflation in that period. In 1994 he took a large loan in sum coupons (the predecessor of the current currency, sum), bought 45 cows and leased 31 hectares of land on a 50-year lease. As the outstanding loan devalued rapidly, he paid it back easily and started his private farming business without much debt. He re-registered in 1998, when a new land reform movement was launched, focusing on the restructuring of the non-functioning collective farm enterprises. He pays a virtually symbolic amount for land rent per year, namely 2,000 sum per hectare (\$2), and has specialized in dairy livestock since the very beginning. Taking us around his farm, it became quite clear he fares very well, and it is no surprise that we were taken—in the old Soviet tradition—to this farm, rather than to one facing difficulties. The farmer explained that the state order system and the delivery of subsidized inputs actually works favourably for cotton and wheat farms. This is particularly the case when the farm produces an above-plan surplus, which can be sold at somewhat higher prices, but which also provides high-value by-products such as edible oil. He made calculations to show that, even with the low official prices paid by the government for cotton, sufficient profit could still be made with low input prices and a very high (yet possible) yield. He is satisfied with his farm, although he would like to lease more land, for example, 50 hectares for crop agriculture, and 50 hectares for additional pasture. Then he would be able to keep many more cows and bulls than his current 200 (plus 100 calves). This is not possible at the moment, and he even stated that there is some resistance within the management of surrounding collective farms to the shedding of land to private farmers.

He was very clear about working conditions on his farm. He has 32 workers, who work eight hours a day (while workers in the *shirkats* work 10–12 hour days). In the *shirkats* the salary is only 7,000–8,000 sum a month (\$7–8), while the private farmer pays his workers 16,000–20,000 sum a month (\$16–20). Furthermore, as is well known in Uzbekistan, *shirkat* workers are often not paid on time, or at all, for years in a row, while the private farmer pays his workers every 15 days. Another important difference from the collective farm enterprises is that, as the owner said: “Nobody steals from me, and I control every input used”. This is an important difference, as in the *shirkats* asset stripping and stealing is widespread.

**Source:** Author’s field notes, Fergana valley, November 2002.

***Rural inequality in transition***

Possibly the most fundamental determinant of rural inequality is the differentiation in access to and possession of assets, in particular land. Income inequality in those countries that have gone through a more profound land reform and farm restructuring process (Kazakhstan, Kyrgyzstan and Tajikistan) is substantial, as seen later in the paper. Rural income inequality is less in countries where large-scale units have persisted in combination with a very important household plot economy, functioning in contractual or parasitic symbiosis (Spoor and Visser 2001; Visser 2003a). Furthermore, in the latter cases, more or better social safety networks have sur-

vived, cushioning the negative effects of reform. Before analysing rural income inequality and its relation with access to land (and other assets) in more detail, income inequality should first be considered in general.

Data on income inequality remains scarce, and the following discussion must therefore be based on various reports and studies whose methodology is not always comparable. Nonetheless, it is clear that income inequality has increased substantially during transition. This is the case to varying degrees in most countries in Central and Eastern Europe and the former Soviet Union, including Central Asia (Milanovic 1998). Table 14 shows that income inequality on average has grown from close to 0.30 (Gini coefficient<sup>19</sup>) before transition, to 0.40–0.47 during the mid- to late 1990s. Rural income inequality is generally slightly higher than urban. These data are consistent with those of many developing countries.

**Table 14: Gini coefficients of income**

	1989	1993–1994	1996–1998	1998	1999
Kazakhstan	0.28	0.33	0.35	—	—
Kyrgyzstan	0.27	0.55	0.47	0.41	0.40
Tajikistan	0.28	—	0.47	—	—
Turkmenistan	0.28	0.36	0.45	0.41	—
Uzbekistan	0.28	0.33	0.40	—	—

Source: IMF and World Bank 2002; UNICEF 2002; Milanovic 1998.

In considering income inequality, it is crucial to analyse the accompanying phenomenon of poverty. The figures presented in table 15 only indicate average poverty levels, hiding rural-urban and regional differences, but they present an overview of poverty, which is intimately related to growing inequality of income and access to assets. The Central Asian republics already had quite high levels of poverty prior to independence, which the Soviet regime called “population below a socially acceptable minimum”, and poverty increased substantially during the first decade of transition. The population living below the poverty line in Central Asia is very high indeed, ranging from 27 per cent in Uzbekistan—which Cornea (2002) found could be an underestimate—to 83 per cent in Tajikistan. Tajikistan suffered a bloody civil war during 1992–1997, while initial conditions had already determined it as the poorest country in the USSR (table 15).

**Table 15: Poverty in the Central Asian states (per cent)**

	1989	1999
Kazakhstan	16	35
Kyrgyzstan	33	54
Tajikistan <sup>a</sup>	51	83
Turkmenistan	35	—
Uzbekistan	44	27

<sup>a</sup> For 1999, IMF and World Bank (2002) indicate that 83 per cent poverty is calculated at \$4 per day as poverty line. At \$2.15 per day the figure would be 68 per cent. The same source has a higher figure for 1989, namely 59 per cent (with a poverty line of 75 roubles per month, approximately \$80 at 1990 conversion rates).  
Source: IMF and World Bank 2002; Government of Kyrgyzstan 2001; Falkingham 2000:77; World Bank 1998.

<sup>19</sup> A measure of inequality within a population.

This paper focuses, however, on rural inequality and poverty, both absolute and relative. From that perspective the following four basic phenomena are revealed: first, rural populations are much poorer than urban populations (therefore rural poverty is higher than the averages indicated in table 15), and as the majority of the Central Asian population is rural, this means that most of the poor are rural, and therefore very poor. This was already the case at the outset of transition, as stated for Uzbekistan: "Rural areas are disproportionately impoverished with poverty rates of about of 57 percent" (World Bank 1998:222). During transition rural poverty remained higher, and in some cases the gap has grown. In Kazakhstan rural poverty in 1996 was estimated at 39 per cent, while urban poverty was 30 per cent (World Bank 1998:14). In Kyrgyzstan in 1999 these figures were 60 and 42 per cent respectively (Government of Kyrgyzstan 2001:5). In addition to higher headcount ratios of poverty, poverty is often also deeper in rural than in urban areas.

Second, poverty is distributed regionally in highly unequal terms. For example, the incidence of extreme poverty, as published in the *Poverty Reduction Strategy Paper* (Government of Tajikistan 2002) for Tajikistan, was 23.4 per cent for rural areas and 18.6 per cent for urban areas. In Uzbekistan there are also huge regional differences in the distribution of poverty. According to figures provided by the World Bank office in Tashkent, some largely rural areas have a much higher incidence of poverty, such as Namangan (39.7 per cent), Karakalpakstan (36.4 per cent) and Kashkadarya (62.6 per cent). A regional breakdown of the extreme poor shows that only 2.1 per cent of this population reside in the capital Dushanbe, while 45.7 per cent are located in the southern Khatlon region, bordering on Afghanistan (Government of Tajikistan 2002:10). A similar pattern of extreme differences can be seen in Kazakhstan, where poverty is very limited in the north (9 per cent) and very high in the—more populated—south (69 per cent). Central, western and eastern regions have poverty rates closer to the national average (World Bank 1998:ii).

The two other disturbing phenomena regarding poverty development are, third, an overall higher incidence of child poverty in rural areas, and fourth, a deepening feminization of poverty (except possibly in Kazakhstan, according to World Bank 1998). In Uzbekistan the reduction of government subsidized services has led to increased poverty among rural workers, especially female workers, as they were most affected by the reduction in child-related support services (Asian Development Bank 2001). Primarily, however, as discussed earlier, women have been the main casualties of the unemployment caused by declining investment in social rural infrastructure (education and health care). Instead, in many areas of Central Asia an increasing feminization of farm labour and an increase in private plot production (also mainly carried out by women) is observed. This mounting workload coincides with a decline in income, as women tend to hold the lowest paid jobs, as well as the informal, unpaid jobs. Young women form the poorest group in rural society because they have to take care of children and are unable to engage in lucrative trade activities (Kandiyoti 2003).

## **VI. Land Reform, Farm Restructuring, Rural Inequality and Civil Society**

Land reform and farm restructuring have led to a whole new pallet of tenure systems in the Central Asian states, as has been shown. In those countries where many collective and state farms have been the objects of privatization (by buy-out, distribution of land shares, or splitting up into peasant farms), access to land has become the essential factor in determining poverty. Although only scattered data are available, these indicate that substantial inequality in land ownership or access to land exists in Kazakhstan and Kyrgyzstan. During the various waves of land reform it was the powerful rural elite, with the commercial urban nouveau riche, who were able to acquire the best and even most of the land. Given severe economic need, an absence of functioning land markets and widespread ignorance about rights and prices, large farms were often bought up by managers or outside investors for a minimal price, leaving *kol-khoz* workers with little more than symbolic compensation, and very often no land. In both countries, the relative importance of the household (or subsidiary) plot economy diminished with the growth of the peasant farm sector (see table 9).

Turkmenistan and Uzbekistan have kept most of the Soviet-type tenure system intact, with the *shirkat* (previously, *kolkhoz*) sector remaining dominant during the 1990s. Only recently have there been signs of more profound tenure reform. Initial reforms were mainly focused on changing management structures within the large farms, the introduction of leasehold farming (in Turkmenistan) and the gradual expansion of the peasant farm sector (in Uzbekistan), while maintaining strict control over the input and output (wheat and cotton) markets. Only since 1999 has the peasant farm sector in Uzbekistan grown faster, as many of the non-solvent *shirkats* went through a process of sanation and elimination. These processes have also exacerbated inequality, introducing a new form of rural social stratification. In Uzbekistan, the rural population is basically divided into three strata (Spoor 2002). The poorest are the *kolkhozniki*, the *shirkat* workers. They receive low wages (if they are paid at all, as there are extensive wage arrears), and are considered to be socially excluded, as the *Voices of the Poor* report for Uzbekistan states:

In the first instance, this must include *kolkhoz* workers who have been elbowed out of the distribution of social wealth. According to the participants [of the study]...*kolkhoz* workers are the most humiliated and oppressed social stratum. Not only have they not received their wages for years, but they stick to the *kolkhoz* for two reasons only: people of an older generation wish to continue their work record until it is long enough for them to retire and receive their pension; and only with the consent of the *kolkhoz* can one obtain a land plot for building a house or land for a household subsistence plot or a farming unit ("Expert" Centre for Social Research 1999:21-22).

The middle social stratum is often formed by the *dekhan* farmers, families who have officially registered their household plot as a farm, and have in general acquired slightly more land than the basic subsidiary plots. Finally, the relatively well-off stratum is formed by the traditional rural elite, the farm managers of the *shirkats*, together with the newly established private peasant farmers (see box 4).

In Turkmenistan, and to a lesser extent Uzbekistan, the social infrastructure of the previous *kolkhozy* and *sovkhozy* has remained largely intact, although some of the heavily subsidized social services that were provided through these production units have disappeared. They were part and parcel of what was known as the system of "workfare" (rather than "welfare") provisioning. In this sense both countries have retained a substantial part of the social fabric established by the collectivized organization of agricultural production. This was confirmed in a recent field visit to a rural area near the city of Namangan, in the heart of the densely populated Fergana valley. Two representatives of a farmers' association (FA) explained that they had previously worked in the production management of a *shirkat*. They have since formed what they consider to be a non-governmental organization (NGO), providing assistance to peasant farms, helping the government to implement its decrees and providing agrotechnical services to farmers.<sup>20</sup> To the question of who finances this farmers' association, their answer was that 2.5 per cent of (in itself very low) land tax and a small share of profits (1 per cent) went to the FA. This funding allows the FA to provide some credit to farmers, overcoming the rural finance bottleneck, which is very serious throughout the CAS. The FA also has some influence in eliminating non-solvent *shirkats*. Unfortunately, the farmers' associations in Uzbekistan and counterparts in Turkmenistan have a reputation of being used by the central and regional governments to influence crop mix and output marketing, and to control input streams and technical assistance.

Major institutional gaps are visible in rural areas, in particular where the previously dominant collective production structure has been destroyed. First, there is a lack of credit, as there are not enough new private credit institutions to fill the gap left by the former planned system of credit transfers. Unfortunately, in some countries, such as Kyrgyzstan, early experiments with rural banks ended in disaster, and simply increased distrust of the state. More recent experiments, such as that initiated by the Kyrgyz Agricultural Finance Corporation (KAFC) in cooperation with the United Nations Development Programme (UNDP), have been more successful:

<sup>20</sup> Author's field notes, Namangan, September 2002.

[The KAFC] possessed a large number of branches throughout the country, which was a necessary precondition for micro-credit operations. To allow for the disbursement of credits of 5,000 som per person (approximately US\$150) it was necessary to introduce new credit mechanisms that would minimize both transaction costs and repayment risks. The applied principle was based on social collateral. To circumvent the need for physical collateral, loans were disbursed to groups of five to 12 people who were responsible for repayment as a group. Moreover, future credit disbursement within a given village was made dependent on the timely and complete repayment of already financed credit groups. Another measure taken to reduce administrative costs was assessment and approval of the applications by local village associations (Pelkmans 2003:188).

In the gradualist reform countries too, initiatives have been introduced to overcome the credit squeeze. These are mostly undertaken by donor-supported NGOs or CSOs, which have started microcredit operations. An example is the Business Women's Association (BWA), which has various regional branches, such as the Kashkadarya BWA, operating in rural areas around Karshi city and in the city itself. Nevertheless, many of these CSOs still have substantial problems in terms of institutional capacity, management systems, and administrative and financial procedures, and as a consequence have unsustainable credit recovery rates and are confronted with substantial fraud (Moauo 2002). These microcredit programmes are mainly focused on assisting the rural poor to gain access to working capital or acquire assets in order to survive.

A second crucial institutional gap lies in management of land and water resources. This was previously carried out by the collective (or state) production units, while the supply of water was (and still is) guaranteed by government-run water agencies. Since reform, land is now managed in a great variety of forms, ranging from private-owned household plots, to investor-owned large private farms, and even small associations of peasant (leasehold) farmers. Land borders are often contested at the micro level, and also between regions and states (see ICG 2001), and although the previous tenure system has disintegrated, there is no sufficiently developed institutional alternative.

Water is a much more complicated resource to manage, especially in the face of weakening state services and in a context of increased demand, increased need for cautious management and deteriorating water management systems (Spoor and Krutov 2003). There are many areas in Central Asia with irrigated agriculture, such as the important Fergana valley (in Kyrgyzstan, Uzbekistan and Tajikistan), the regions of Djambul and Kyzlorda in southwestern Kazakhstan, and the more western regions of Uzbekistan, further down the Amu Darya, such as Khorezm, Kashkadarya, and Karakalpakstan, and Dashkhovuz in Turkmenistan (Spoor and Krutov 2003).

In some areas new civil society organizations, such as the Water Users' Associations (WUAs) have merged and are managing, or at least acquiring some form of local management and control over, water. Because it is a scarce resource, in particular in southern Kyrgyzstan and most of Uzbekistan, this is an important development. Kyrgyzstan has already had quite a lot of experience with these new arrangements, as land reform was often jointly implemented with profound institutional changes in the framework governing water resources. In Uzbekistan, the issue of water charges, pricing and WUAs only become more important toward the end of the 1990s, and the associations were implemented in various places with technical assistance from the European Union's Technical Assistance to the Commonwealth of Independent States (TACIS) programme.

As Wegerich has noted:

In Uzbekistan old institutions have taken control. It is arguable that this is based on the experience of the former state farm managers. In Kyrgyzstan further progress has been made in the reforms of the organisation of the irrigation management. However, it seems that this process is not helpful in terms of democratic development of the WUAs. In any case, if former leaders

are held accountable for their decisions and their actions are transparent then the development could be meaningful and sustainable in future and WUAs could become a participatory bottom-up movement. Naturally, members of WUAs will need guidance that will be helpful in their initiative to make changes in the structure of the WUAs. However, as the TACIS pilot project in Uzbekistan indicates farmers want to take responsibility for their irrigation system and are willing to participate in the WUAs, if the old institutions are not obstructing them. Furthermore, the project in Uzbekistan showed that farmers feel empowered if the WUA is a participatory bottom-up movement (Wegerich 2000:26).

WUAs might also become instrumental in not only managing water resources in a more sustainable manner, but also avoiding – through consultation and negotiation between users – conflicts over water, which at micro, regional and interstate levels seem to be the rule rather than the exception (ICG 2002; Spoor and Krutov 2003). The overuse or misuse of water is an extremely important issue in Central Asia, as it contributes to the gradual disappearance of the Aral Sea and the deterioration of the Aral Sea basin. Most water is used by agriculture (with cotton receiving the largest share), and therefore the development of water management institutions is enormously important.

What is the link with poverty, one might ask? The highest indices of extreme poverty can be found in those areas that have suffered severe soil degradation and water shortages. This shows that there is a direct link between improved water management (especially at the local level), poverty reduction and sustainable development. A fundamental change is needed at national, regional and local levels in the institutional arrangements governing water, in particular for agriculture. The complex changes in tenure systems, including fragmentation, will have to be accompanied by decentralized systems of water management, in which WUAs and other stakeholder organizations can play a fundamental role.

Third, new NGOs have emerged with concerns over many aspects of social policy, in particular in Kyrgyzstan (which has over 1,000 CSOs) and Kazakhstan. In Uzbekistan and Turkmenistan the NGO sector is more limited, although it is growing in Uzbekistan. NGOs represent many interests, such as women's empowerment, covering reproductive health and the environment, microcredit and income generation. There are NGOs supporting unemployed youth; focusing on children from low-income households; or concerned with human rights, refugees or the improvement of interethnic relations (Holt Ruffin and Waugh 1999). Business associations have also sprung up, such as local chambers of commerce and groups that function as "business incubators", assisting local small- and medium-sized enterprises in writing business plans and improving their financial administration. Rural NGOs, however, are still rare; most NGOs are found in the cities, and are often donor-dependent.

Apart from these new types of CSO, which emerge from the presupposition that civil society in transition has to start from scratch, traditional CSOs remain important in countries such as Turkmenistan and Uzbekistan. The *mahalla* (neighbourhood organization) not only represents local interests and forms safety networks, but also functions as a "transmission belt", just as it did during the Soviet era:

Mahallas have played an important role in community life, especially in conducting family affairs and events such as weddings and funerals, and resolving disputes between family members or neighbors. Because these institutions were so important, in the Soviet period they were put under the strict control of the local governments. During the relatively open period of 1988-92, mahallas became more independent. Today, however, local governments fund some mahalla activities, including the salary of each mahalla's head. Despite this funding, which significantly decreased the mahallas' independence, these institutions have deep roots in the society (Polat 1999:150).

The *mahallas* in Turkmenistan and Uzbekistan have important safety network functions, including administering food subsidies, and even food distribution and social provision for households in distress. They could well become an instrument of “social society transition”, forming part of a new social fabric, but this will depend on their becoming more independent, bottom-up civil society organizations. They have a long history, going back well before the Soviet era, and could become more important if the privatization of land were to accelerate and the *kolkhozy* were to collapse. The reinvigoration of the *mahalla* as a replacement of the social functions provided by the *kolkhoz* coincides well with the nationalist tendency to move away from the Soviet legacy and toward indigenous national or Central Asian heritage (Mandel 2002).

Nevertheless, at the moment the *kolkhozy* and other state subsidized forms of (off-farm) employment are still crucial for the livelihood of the rural population in Uzbekistan and Turkmenistan. Even when wages are not paid, people are building up pensions as they remain on the books of these enterprises. Furthermore, for women, maternity leave benefits are a crucial component of formal employment (Kandiyoti 2003). Finally, through their membership of collective farms and their large-scale successors, households have access to private plots and necessary inputs such as fodder (whether formal or informal/semi-legal).

Building civil society in rural transition will depend very much on the specific transformation process of the large-scale farms and marketing systems. In cases such as Kazakhstan and Kyrgyzstan, where many of the collective units have been destroyed, civil society must be built from scratch, with the setting-up of farmers’ associations and other forms of collective action. This is a difficult and slow process, especially as the legacy of decades of forced cooperation makes people sceptical of new forms of cooperation. There is also evidence of collective farm structures being turned into a service-type of environment (of installations, infrastructure, connections, etc.), which individual farmers still use. In most cases, land reform has destroyed the old structures for reasons of economic efficiency, without taking into account the social significance of these organizations and micro-institutional arrangements for rural equity. It is obvious that land reform and farm restructuring are necessary to improve farm efficiency and increase yields and output. It is nevertheless also important to use and transform the social functions of the collective farms, in particular when municipal or civil society organizations do not take direct control of these functions.

## VII. Conclusions

In this paper it is argued that agriculture and rural transition has been the Cinderella of the 1990s reform agenda. Only in some countries of Central and Eastern Europe and the former Soviet Union was rapid and profound land reform undertaken (for example in Albania, Armenia, Bulgaria and Georgia). From the first, the point has been made that policy makers did not analyse the political economy of agriculture clearly. Reform focused on increasing efficiency by privatizing assets (such as land, cattle and machinery), liberalizing markets and the withdrawal of the state, with the objective of forming a large sector of family-run farms (whose labour productivity would be higher). What was grossly underestimated was the resulting institutional vacuum created by the elimination of the collective farm model and the state order systems for the social fabric of rural areas. Clearly, the old system was highly inefficient in economic terms and functioned primarily as a state-directed social organization of the countryside. However, the elimination of the old Soviet system of social organization created a vacuum, which has still not been filled in many places.

Although this vacuum has contributed significantly to the increase in human insecurity in rural areas of the CAS, there has been a surprising continuity in rural power structures. The rural elite, in particular during the early 1990s, was not much in favour of relinquishing its existing influence, which was exercised through collective property and the state order system. When reforms were introduced, the elite was in a position to benefit the most. And as most land reform activities were not transparent, the existing power elites were able to obtain the best land,

and, through asset stripping, most of the existing assets, such as buildings and machinery. In the more recent waves of reform, such as the implementation of the bankruptcy law in 1998 in Kazakhstan, outsiders, such as urban investment groups, banks and agro-industrial conglomerates, have also been able to acquire substantial land resources (Gray 2000). For the *kolkhozniki*, the situation changed little, as they remained dependent on the vagaries of the management of either the *kolkhozy* or their heirs (such as the *shirkats*). The *kolkhozniki* are the poorest in the rural areas, benefiting only from the symbiotic relationship between collective land and subsidiary household plots (Spoor and Visser 2001), through which they can make use of some of the subsidized inputs (as in Turkmenistan and Uzbekistan).

There is another reason why agricultural and rural reform did not progress sufficiently and why the agricultural sector remained stagnant for most of the first half of the 1990s. Many reform-minded policy makers, assisted by Western advisors who flew in to preach the Washington consensus, emphasized macroeconomic stabilization, market and trade liberalization and state withdrawal. This was seen as both necessary and sufficient to provoke a positive supply response, especially from the agricultural sector, which was considered both heavily taxed and price repressed. Institutional reform and the building of markets and their corresponding institutions were unfortunately not seen as essential, culminating in a situation that can be best defined as “missing markets and institutions”. This is an important difference from the reforms undertaken in countries such as China and Vietnam, and their outcomes in terms of performance.

### ***Main outcomes of land reform and farm restructuring***

In the Central Asian states the process of land reform and farm restructuring was much more gradual than in other parts of the CEE and FSU. In Kazakhstan and Kyrgyzstan land distribution predominantly took place after the mid-1990s, as most changes before then had been rather cosmetic. For example, instead of having a *kolkhoz* called “1<sup>st</sup> of May”, the name plate at the front gate would read “Peasant Association 1<sup>st</sup> of May”.<sup>21</sup> Although on paper, land shares had been distributed to the *kolkhozniki*, it was not clear to many of them where their land was physically, or what they were entitled to do with it. In Turkmenistan and Uzbekistan, during the first half of the 1990s, only certain forms of leasehold were introduced, which would later be expanded. Instead of forming a substantial peasant farm sector, the governments decided to expand access to very tiny (but in economic terms very important) household plots. With the population in these countries growing, especially in the countryside, this was also necessary to guarantee a minimum income source. In Kyrgyzstan, a rapidly expanding peasant farm sector, with an average farm size of 10–20 hectares, has emerged since the waves of land reforms in 1994–1995, and this has contributed to substantial agricultural growth in the second half of the 1990s. In other CAS the formation of the peasant sector has been slower, although since the late 1990s, and in the early years of the twenty-first century, there has been substantial movement, even in Turkmenistan (albeit to a lesser extent).

The previous collective system still exists in large parts of Turkmenistan and Uzbekistan. The heirs to the collective farms—although the insolvent ones have increasingly been liquidated in Uzbekistan—are still dominant in the farm structure. However, the household economy now produces most agricultural output. In Kazakhstan there remains a substantial dichotomy between large farms (although most have been privatized) and the household plots. In all CAS, except Kyrgyzstan, large enterprises still produce most of the cotton and grain, while high-value products come from the household plots. On the one hand, the rapid expansion of household plots has contributed to income development or stabilization, but on the other hand it would be an illusion to think that these very small plots of land, often less than 0.15 hectares can transform themselves into viable peasant farms. Peasant farms can only emerge with a deepening of land reform and farm restructuring.

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<sup>21</sup> Author's field notes, Kyrgyzstan, 1994.

A substantial institutional vacuum emerged during transition, especially in those countries where state withdrawal and privatization processes were implemented rapidly. In Kazakhstan, where input markets were liberalized relatively quickly but the state order system for grain remained in force for some time, the new situation led to bankruptcy for newly formed farms. Transport infrastructure collapsed, property rights were not clearly defined, market outlets became uncertain, credit was unavailable, and new market institutions, such as standardization, contract legislation and enforcement, and insurance had not yet developed. Local and regional administrations had little capacity to stimulate change, while central governments were more focused on the macroeconomy, on specific sectors such as oil and gas and the improvement of urban infrastructure.

Poverty has become a serious problem in the Central Asian states. Although as Soviet republics they already belonged to the poorest of the USSR (in particular Kyrgyzstan and Tajikistan), the situation has substantially worsened over the last decade. Rural poverty is more severe than urban poverty, in relative and absolute terms. Income inequality has increased rapidly, and from being relatively egalitarian (like elsewhere in the FSU), the CAS societies are now comparable to many developing countries, with Gini coefficients of income in the range of 0.40–0.47. Inequality of income is related to inequality in various forms of capital: human, physical and social. In most countries of Central Asia, the “old” farm workers, or the *kolkhozniki*, belong to the poorest; the households that are producing some surplus for the market are better off; and independent peasants are becoming well-to-do farmers. Extreme poverty is a serious problem in Kyrgyzstan, Tajikistan and several regions of the other countries, in particular where fertile land and water are scarce, and where deterioration of these resources is a serious problem.

Civil society organizations have emerged, particularly in Kazakhstan and Kyrgyzstan, where economic (and partly also political) reform has been most advanced. However, these organizations are often in part vehicles for narrow personal (sometimes even criminal) interests instead of real associations for collective action (Mandel 2002). In general CSOs are still an urban phenomenon (in some cases heavily dependent on foreign aid), and civil society in rural areas—where much of the “old” social fabric based on the collective farm has been destroyed—is weakly developed. Progress has been made in some areas, such as microcredit and income-generation activities, in particular those focused on improvement of the position of rural women. In Turkmenistan and Uzbekistan, however, where much of the collective rural organization still existed and political reform was either limited or non-existent until the late 1990s, the opposite is now the case. New forms of CSO are sparse, while the traditional *mahallas* still play an important role in social services, social safety networks and cultural cohesion. In Tajikistan, land reform and farm restructuring progressed rapidly after the return of peace in 1997. However, the individualization of agricultural production and the bloody civil war with the dislocation of many hundreds of thousands of internally displaced persons have contributed negatively to civil society development.

### ***“Collective action and rural development”***

The agricultural and rural sector in the FSU, and in particular in the five CAS, saw a number of very serious problems emerge during the first decade of reform. Land reform and farm restructuring in Kazakhstan and Kyrgyzstan, including privatization, the creation of a sizeable peasant farm sector, the liquidation of many insolvent large-scale state and collective farms, has led to recovery since the mid- to late 1990s. However, rural-urban migration, poverty and disruption of social relations have also occurred, revealing an important but underestimated contradiction of transition: most agricultural reforms are undertaken to improve efficiency, and equity is not taken into account. The transformation of the social fabric of rural areas is barely analysed. This is rather surprising: in such a large-scale transformation of the social relations of production, this institutional aspect should be accorded much greater priority. There are four policy areas that demand urgent attention:

1. The agricultural and rural sector, crucial to all five Central Asian countries, must move to the top of the reform and development agenda of their respective governments. There has been a tendency to focus exclusively on the development of the oil, gas and other industrial extractive sectors (especially in Kazakhstan, Turkmenistan and Uzbekistan). These sectors have been successful in attracting foreign direct investment, and have become the motor of rapid economic growth (particularly in Kazakhstan and Turkmenistan). The proceeds of this natural resource-driven growth have been used for investment in specific strategic sectors, such as the car industry in Uzbekistan, or infrastructural investment, such as luxurious hotels in regional capitals, and the building of a new capital in Kazakhstan. Another important income generator was the traditionally profitable cotton sector, in particular in Turkmenistan, Uzbekistan and Tajikistan: through continued heavy taxation of this sector and the monopolizing of trade, governments (and central banks) fared very well with cotton. However, these countries' rather unbalanced growth models are the typical result of a lack of investment in agriculture, which after a decade of transition is suffering from severe deterioration of its capital base, for example machinery and irrigation and drainage systems.
2. The criterion of efficiency should not rule reform alone: equity is *equally* important. The rapid increase of income inequality (and of access to resources such as land) has become a serious limitation of the growth model described above. Extreme poverty is widespread in the CAS, leading to social instability and increased human insecurity. In order to achieve sustainable, but also investment-led and broad-based growth that can reduce poverty levels, access to land must be broadened and the policy focus must be directed to the development of non-farm rural economic development (McKinley 2002).
3. Institution building is crucial for agricultural reform and rural transformation, including the development of public-private credit (and microcredit) systems, agricultural services, transport linkages, and information on market development. Furthermore, the overall legal framework of property rights, transferability of land or usufruct (leasehold) rights, and its enforcement by an independent jurisdiction, should receive a much higher priority.
4. The social fabric of rural areas is a complex issue for reform, as it often suggests that there was no civil society development prior to reform, and that with reform all civil society organizations have to be built from scratch. As has been argued here, this is not the case. Therefore, wherever possible, collective structures need to be transformed (for example, into service cooperatives) rather than destroyed. On the other hand, new civil society organizations – such as those involved in microcredit, savings, social services, and support to small and medium companies – are urgently needed to build a market economy. Governments should therefore provide CSOs with more room to manoeuvre, since they currently see them as foe rather than friend. CSOs can improve the livelihoods of the rural population, and contribute to the transformation of social relations.

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