

## Commons and collectives: the role of social capital in Central Asia's land reforms<sup>1</sup>

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### INTRODUCTION

The process of land and agrarian reform in post-Soviet Central Asia poses two curious dilemmas. The first dilemma is about how we conceive of the difference between commons and collectives. A great deal of experience has been gained internationally which suggests that a pragmatic view should prevail of the range of land tenure options available in economic development, and the many ways in which various forms of state, common, and private tenure may be combined (Runge 1986, Bromley 1989, Behnke 1994). The debate about land reform and farm restructuring in former Soviet republics, however, tends to be couched in terms of stark choices between state, private and collective ownership, whether of land or of operating capital (Brooks and Lerman 1994, Deiniger 1995), and rarely mentions 'true' commons. But it will not surprise theorists of common property to learn that the future prosperity of the agrarian sectors of former Soviet Central Asian republics is likely to require at least some forms of 'true' commons to persist.

The dilemma is that the prospects for initiating a debate on the issue of common property are slim at present in Central Asia because the meaning of the term 'collective' and, by association, 'collective action' and 'common property' has been devalued. Discussion of the underlying substantive issues is hampered by a widespread perception that these concepts are necessarily associated with the failed Soviet experience of agricultural collectivisation (e.g. Deiniger 1995). There is a desperate need for new and innovative ideas in Central Asia's land reform process, but language itself can be deceiving. While the now-extensive common property resource management literature offers many useful insights in understanding the range of land tenure options potentially available, they are likely to be misunderstood unless the referents of 'collective' and 'common' property are specified very carefully. Collectivities that are self-governing institutions for effective natural resource management in agriculture are fundamentally different from the Soviet experience of hierarchically controlled agricultural collectives.

The second dilemma is substantive rather than semantic, and concerns how we conceive of collective action itself in transition economies. A growing literature points to the importance of social capital in economic development referring to 'the features of social organisation such as trust, norms and networks that can facilitate the efficiency of society by facilitating coordinated actions' (Putnam 1993: 167). It is argued in this paper that a fuller understanding of the way in which economic institutions are socially embedded (Granovetter 1985) will greatly assist those trying to bring about successful processes of economic transition in the former Soviet Union (FSU) and elsewhere. Efficiency-enhancing forms of collective action appear to have been undermined by the FSU's experience of agricultural collectivisation (cf. Mearns 1996). The dilemma for Central Asia's land and agrarian reform process is that social capital appears to be an essential ingredient of a successful economic transition, yet it may be lacking precisely where it is most needed. Trust, in particular, emerges as a precondition for successful land and agrarian reform, but how is it possible to build or generate trust through public policy? In order to find possible ways out of this dilemma, efforts to understand the role of groups in society need to be mounted on a broad

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front going beyond the valuable yet ultimately limited insights of the 'new institutional economics' (Stewart 1996, Roe 1993)

This paper is organised as follows. First we outline an approach to distinguishing modes of operation of groups in society offered here as a way to distinguish collectives and commons. Next we consider two empirical cases from post-Soviet Central Asia in order to shed light on some of the institutional challenges faced in the process of land and agrarian reform. The first describes the system of common pasture use in Kyrgyzstan and explains why this does not at present conform to 'good' group behaviour in the management of common property. The second case describes the process of land reform and collective farm restructuring in one district of Uzbekistan, and illustrates how the lack of social capital, or relations of trust/reciprocity, presents a major obstacle to successful economic transition. The paper concludes with a brief discussion of the underlying theoretical issues and suggests some questions for further research.

## I TOWARDS A THEORY OF GROUPS

From the broad and eclectic literature on institutions in society, two views of the functions of institutions may be contrasted. The first is the efficiency argument that institutions are a response to market failure. This view derives from the very powerful insight of the 'new institutional economics', that "institutions matter when transactions are costly" (North 1990). While this has greatly contributed to our understanding of the role of institutions in economic development, its weakness is its tendency towards functionalism (Harris et al. 1995). The second view is that institutions are formed to advance the claims of their members to power and resources, and play an active role in the building of civil society.

Frances Stewart (1996) offers a useful typology of the various modes of operation of groups in society, which corresponds to the concept of 'institutional cultures' as used in the business literature. The term 'group' is used here to include all possible types of formal and informal institutions and organisations, following the distinctions made by Douglass North and others (North 1990). This typology helps distinguish the type of institutions required for effective common property resource management from those represented by Soviet-style agricultural collectives. Stewart describes four modes of operation of groups which are not mutually exclusive. Many groups exhibit characteristics of more than one of these modes of operation.

*Power control (P/C)* Such groups are characterised by hierarchical relations in which orders are passed down from top to bottom, leaving those occupying lower levels of the hierarchy little choice but to comply. The structure is often backed up by strong social or ideological norms so that threats need rarely be used, but they also incur high monitoring and supervision costs. The modern army is an example.

*Market quasi-market (M)* This refers to all groups involved in 'conventional' economic transactions including firms etc. Owing to information and transaction costs, however, many operations remain outside of the market (cf Williamson 1985). Power relations within groups may mean poor terms may be forced on less powerful constituencies. In the field of rational choice sociology, a wide range of social transactions including social norms, may be understood as quasi-market operations (Coleman 1988).

*Trust reciprocity (T/R)* Such groups are characterised by a high degree of commitment to the group and a prevailing ethos of equality, trust and reciprocity among members. Such commitments generally evolve as a result of repeated interactions of long duration. Shared commitments need not imply equality among members, however, many feudal systems, for example, have exhibited T/R characteristics. Group norms tend to be influenced strongly by prevailing social norms (embeddedness). T/R-type groups may also be efficiency enhancing, because T/R economises on government and monitoring, and makes the most of local knowledge (Baland and Platteau 1996).

*Tradition convention (T/C)* Such a mode of group operation is characterised by historically evolved norms and values. This mode of operation is almost never exclusive, but can reinforce other (T/R, M, P/C) modes of operation.

Agricultural collectives in the FSU strongly exhibit P/C characteristics in their mode of operation. The standard model of agricultural organisation was imposed throughout the USSR from the mid-1930s, codified in the '*kolkhoz* [collective farm] model charter'. Peasant households were replaced by large 'brigades' as the dominant production units. They were given daily assignments by brigade leaders who in turn received their tasks from higher authorities. The farms were strictly controlled by district and *oblast* (region) party and state functionaries who could bypass farm management when considered necessary. The dominance of the Communist Party structure ensured compliance with the P/C mode of operation of collectivised agriculture in at least three ways (Van Atta 1993): the power of party *nomenklatura* over hiring and firing decisions, immunity of party members from state prosecution, and the finely calibrated system of access to privileges and scarce goods. As Van Atta has put it, the party 'governed who had what privileges, a powerful lever in a society where all goods were in short supply and all paths of upward mobility were controlled by the party apparatus' (Van Atta 1993: 11). The government structure itself militated against any form of local self-sufficiency on the part of individual farms, and sought maximum control over farms by manipulating their linkages with suppliers and markets. For example, machinery, spare parts and fuel were provided through state supply organisations (*Sel'khoztekhnika*), for which farms were required to pay in kind. This was one of the most important ways in which surplus was extracted from rural areas and funnelled to the cities in the former Soviet Union, and its legacy remains very powerful today.

Soviet agriculture was caught in a vicious circle, which progressively intensified the problem of low incentives to labour productivity. Increasing capital investment led to higher-cost production, with steadily decreasing returns in terms of gross output. Good farmers were deported during collectivisation as 'class enemies', and the prevailing incentive structure drew better motivated and higher skilled labour off the farms and into the cities. The remaining peasants earned piece rates and performed the bare minimum of work on the collective or state farms. Since good farms were held liable for the failures of less successful neighbouring farms, wise farm managers might deliberately ruin their farms in order to get lower plan production targets and higher state subsidies (Van Atta 1993, Khan 1996).

By contrast, it has become almost axiomatic that true 'commons' are underpinned by institutions that exhibit T/R characteristics. Some of the well-documented conditions for successful collective action in natural resource management include: smallish, stable group and resource boundaries, enforceable sanctions, and strong reinforcement of 'good' group behaviour by means of social norms including the high social cost of loss of reputation, a degree of interdependence among resource users, the passive support of or at least benign neglect from government agencies, and the possibility of drawing on local knowledge to enhance efficiency (Runge 1986, Wade 1987, Ostrom 1990, Mearns 1996, Baland and Platteau 1996).

These conditions tend to be absent under collectivised agriculture. Moreover, the prevailing norms of dysfunctional group behaviour under Soviet-style agricultural collectives became progressively more entrenched by the perverse incentive structure, so that tradition and convention (T/C) tended over time to reinforce P/C modes of group operation. The functions of Soviet-style agricultural collectives cannot be explained using the efficiency argument of new institutional economics. Nor could collectives be said to advance the claims of their members, although over time they evolved into an apparatus that does appear to have served rather well the interests of the controlling party bureaucracy. It is suggested here that the likelihood of successful land and agrarian reform in post-Soviet Central Asia depends on the extent to which institutions of civil society are allowed to emerge to strengthen T/R modes of group operation.

## II CASE 1: COMMON GRAZING IN KYRGHYZSTAN

### Significance of livestock production and common grazing in the Kyrgyz economy

The share of agriculture in the Kyrgyz economy is estimated to be between 30 and 40 per cent (World Bank 1993, World Bank 1994), and is currently increasing owing to the severe contraction of industry since the collapse of the USSR. In 1992, livestock contributed around 43 per cent of gross output in agriculture, if physical quantities are valued at current prices (World Bank 1994). Crops make up the remainder of agricultural output. However, some 70 per cent of the Republic's arable land area was formerly devoted to producing livestock feed, including barley.

and other grains legumes such as lucerne, hay and straw. Kyrgyzstan was the third most important meat and wool producing republic in the former Soviet Union after the much larger republics of Russia and Kazakhstan. Total recorded livestock numbers have been falling since 1989, suggesting that the brunt of the decline in agricultural production has been borne by the livestock sector. Total animal numbers fell from their peak of 18 million sheep equivalents<sup>2</sup> in 1989, to around 14 million sheep equivalents at the start of 1994.

However, it is likely that these data significantly underestimate the actual contribution of livestock to the agricultural sector, in spite of falling total livestock numbers. The role of livestock production is becoming relatively even more important, as there are few other economic opportunities, at least in the short term. A significant and rising proportion of livestock production derives from the household sector. In 1991, less than a third of grazing animals were in private hands. By the start of 1994, over half of all grazing animals were privately owned. Much of the livestock and livestock product output from the household sector is untraded or exchanged in barter transactions, and is largely unmeasured by official statistics based on traded output from state and collective farms, and the newer forms of agricultural enterprise resulting from agrarian reforms implemented since 1991. Table 1 summarises the rising share of livestock transferred to private hands between 1991 and 1994.

**Table 1 Changing relative shares of state/ collective and privately owned livestock, Kyrgyzstan, 1991-94**  
(1 January figures, expressed in sheep equivalents)

Type of ownership	1991 (%)	1992 (%)	1993 (%)	1994 (%)
State/ collective	70	61	51	43
Private	30	39	49	57
(of which peasant enterprises)	(0)	(5)	(11)	(8)

Source: Ministry of Agriculture (Livestock Division), Republic of Kyrgyzstan

Note: 'Private' includes both animals owned by individual households and those owned by peasant enterprises

At Independence in 1991, Kyrgyzstan inherited a structurally distorted agricultural sector that failed to reflect its true resource endowments. Over 90 per cent of the territory of Kyrgyzstan is mountainous, lying at altitudes above 1500 metres. Some 44 per cent of this total area, or 82 per cent of the agricultural land area of almost 11 million hectares, is natural pasture land held almost entirely as common grazing<sup>3</sup>. Yet, as a Soviet Socialist Republic (SSR) of the USSR, the Kyrgyz Republic developed an export livestock industry dependent on imported and underpriced feed. Agricultural policy focused overwhelmingly on increasing the size of the national herd. Table 2 shows the increase in total grazing livestock between 1916 and 1991. It is likely that the 1941 livestock population of a little over 7 million equivalents reflects the consequences of forced collectivisation during the 1920s and early

<sup>2</sup> 1 cow/horse = 5 sheep/goats

<sup>3</sup> 'Common grazing' refers to land that is used for grazing livestock by a defined group of land users. Since the pasture land allotted to any given state or collective farm, for example, is also used by its individual member households for grazing their private animals, the territory used by such enterprises is regarded as common grazing. It does not matter whether or not pasture land is fenced for it to be defined as being held or used in common. Fenced pasture land (or, for example, fenced arable land that is grazed following harvest) is understood to be common grazing if it is used by a defined group of land users during any specified period of time. Spring/ autumn grazing in particular includes significant areas of arable land that are grazed before spring planting and after the harvest, as well as hay meadows that are grazed in spring and after cutting in the late summer.

1930s, which is reported to have decimated the livestock population at the time. Livestock numbers increased considerably through the 1960s and 1970s. Between 1960 and 1987, the number of sheep and goats increased by 66 per cent, cattle by over 50 per cent, and horses by 25 per cent (World Bank 1994), reaching a historical peak herd size of 18 million sheep equivalents in 1989, of which 10.5 million were sheep and goats.

**Table 2 Livestock population totals, Kyrgyz Republic, 1916-91**  
('000 head)

	1916	1941	1968	1991
Sheep & goats	2544.0	2529.1	9467.0	9968.1
Cattle	519.0	554.9	912.0	1205.5
of which cows (%)	36	40	42	32
Horses	708.0	407.7	259.7	312.7
Total sheep equivalents	8679.0	7342.1	15325.5	17559.1

Source: Tynaliev (1994)

This increase in the number of grazing livestock was made possible only by an increased reliance on imported grain. By 1987, the amount of grain used for animal feed was twice that for human consumption. Total animal feed requirements quadrupled between 1960 and 1987, while the consumption of feed concentrates (largely grain) increased by six times (World Bank 1994). Along with the increased dependence on imported feedgrain came a decline in the share of animal nutritional requirements met from open pasture. Feed from open pasture declined in absolute as well as relative terms, owing to a reported secular decline in pasture yield under heavy grazing pressure, and the conversion of some pasture land to arable cropland. Efforts were made to improve pastures so as to increase physical yields, based on technical solutions such as the application of herbicides and fertilisers, and re-seeding with higher-yielding forage species, but these efforts affected no more than 3 per cent of the total pasture area.

Since 1991, many of these trends have been reversed. The proportion of animal feed requirements met from open pasture has been increasing, as the cost of imported grain has risen sharply, domestic grain production has fallen owing to input supply constraints, and the availability of higher quality feeds such as concentrates at affordable prices has declined accordingly. Owing to a sharp decline in cereal imports, and a decline in imported seed (e.g. barley from the Ukraine and Kazakhstan), a significant share of arable land has been converted to wheat production. Sugar beet production has also increased to replace lost imports for domestic processing from Cuba. By the late 1980s, the effective level of subsidy to the agricultural sector had risen to levels that could no longer be sustained. Capital-intensive technical approaches to pasture improvement have also proved too costly, with rising input prices, but it is perceived by Kyrgyz specialists and herders alike that at least some formerly 'degraded' pastures are now recovering following the decline in grazing pressure.

With regard to the future of Kyrgyzstan's common grazing lands, on which the livestock sector depends, these apparently positive trends should not be taken as grounds for complacency. They make Kyrgyzstan's common pastures and the evolved system of seasonal transhumance more, not less, important in the transition towards a market economy, in spite of the reduction in the total number of grazing livestock. It is a matter of central importance to the national economy that these pastures are managed in a productive and sustainable manner.

### Grazing systems in Kyrgyzstan

The Kyrgyz were a mainly horse-breeding people prior to the incursion of Russians and Ukrainians into Central Asia in the second half of the nineteenth century. Sheep and cattle were less important overall, since they are less mobile than horses over long-distance transhumance routes, and are less able to get at forage grasses under deep snow. By the late nineteenth century, permanent dwellings became the norm at herders' winter camps, and simple stock shelters were constructed. With an expansion of the irrigated cropland area, especially after collectivisation

in the 1920s and 1930s the transition to a more settled form of agriculture became more marked. Sheep-breeding became progressively more important and more productive, albeit less hardy. Fine wool and semi-fine wool breeds of sheep were developed.

Grazing land tenure in Kyrgyzstan is characterised by seasonal transhumance. Prior to collectivisation, identifiable areas of pasture were customarily owned by kin-based groups, requiring vertical movement between low-lying mountain valleys in the winter to high alpine meadows in summer. Sheep and horses would be pastured together, normally herded by relatives of their owners. With very little fodder crop production, the limiting factor on animal numbers was the availability of forage from winter pastures.

Following collectivisation, this pattern of transhumance continued to prevail. However, a significant proportion of the rural population now remained in villages all year round, leaving the task of distant summer pasturing to relatively fewer specialised shepherds and herders as paid employees of state farms, or members of collectives. One herding family would typically be responsible for 500 sheep or 50-70 cattle. The distance of annual transhumant movement ranges from around 30-40 to 200-300 km from rural settlements. Table 3 shows the fall in the share of the total livestock herding population that remained transhumant following collectivisation. At around 70 per cent, this share has remained remarkably constant throughout the collective period.

**Table 3 Total herding population and share of transhumant herders, Kyrgyz Republic, 1916-91**

	1916	1941	1968	1991
Total number of herders	90,598	72,996	108,284	125,531
Number of transhumant herders	90,598	52,824	78,284	87,362
Transhumant herders (% of total)	100	72	72	70

Note: 'Herders' here include all state farm employees or collective members who look after livestock, and their families and dependants.

Source: Tynaliyev (1994)

During the period of collectivised production, the grazing land of each state farm or collective was allocated by the local Soviet (rural council) for its perpetual use, although all land was state owned.

Under collectivisation, considerable investments were made in sheepfolds and other sheds and stockyards for use during the winter, as well as in feed supplementation. Only yaks and rams remain all year round on open pasture. If there is little or no snow, fine wool and semi-fine wool sheep graze on pastures close to villages and sheepfolds during the day in winter; they are kept in sheds protected from wind during heavy snowfall, and are fed on hay. Shearing of sheep generally takes place around May, before sheep are driven to the summer pastures, however, it has not been uncommon for sheep to be sheared at the high summer pastures where spring arrives considerably later than in the low-lying valleys.

Kyrgyz grazing systems are multi-species systems in that each agricultural enterprise tends to maintain a diverse herd of grazing animals, including sheep and goats, horses, and cattle (and sometimes yaks), even if it does have some relative specialisation in one species. The most specialised livestock-rearing enterprises are the horse studs and other breeding farms, even these also keep livestock of other types.

There are three types of pasture defined by seasonal use: spring/autumn, summer and winter. Of the total pasture area, 3 million ha (33%) are spring/autumn pastures at altitudes of 1500-2500 metres, with a 6-month grazing

season, 3.7 million ha (42%) are high-altitude summer pastures at 2500-3500 metres with a 3-4 month grazing season, and 2.3 million ha (25%) are winter pastures at a range of altitudes with a grazing season of 4-5 months

In **winter** most animals except rams and yaks are housed in sheepfolds and other buildings close to permanent settlements for approximately the period November- March. In good weather they may graze pastures close to these buildings in narrow, sheltered valleys, and otherwise on south-facing slopes with higher insolation and lower snow-cover. In the case of animals owned by land users in the Chu valley that over-winter in Kazakhstan up to 300 km distant they remain longer on the winter pastures in Kazakhstan and from there move straight to summer pastures in Kyrgyzstan

During **autumn and spring**, many animals are kept at night in the same pens and folds as during winter, but are grazed during the day frequently on arable and hay land either before spring sowing or after autumn harvest. Autumn and spring pastures usually lie relatively close to permanent settlements (e.g. 3-4 km away)

In the **summer** herds and flocks are, in principle, grazed on distant high-altitude pastures known as *jaloo*. It is only at this time of year that herders leave their permanent village houses and live in yurts or *bozui*. Throughout the summer season herders tend to move their herds and flocks further and further upslope as new forage growth becomes available, and as lower pastures are grazed out. They return to the autumn pastures when the weather turns, and/or following hay-cutting (usually in late-July - August) or cereal harvest (usually in September). Although experienced herders tend to be familiar with particular valleys or pastures, there is considerable variation on a local scale in the actual areas of pasture grazed at a given time each summer, depending on weather conditions and forage availability.

#### **Pasture forage availability in relation to grazing livestock**

Total numbers of grazing livestock in Kyrgyzstan fell from their 1989 peak of 18.1 million sheep equivalents to a January, 1994 level of 14.2 mn. Much of this decline is accounted for by sheep and goats, which have fallen from 10.5 mn heads in 1989 to 7.3 mn by January 1994. Cattle numbers declined less sharply from 12.1 mn heads (1989) to 10.6 mn (1994), while the total number of horses continued to increase steadily from its 1980 level of 2.6 mn heads to 3.2 mn by 1994. The declining horse population throughout the period of collectivised production, owing to the mechanisation of agriculture, has been reversed in recent years as horses are once again becoming valued for their draught power and as a means of transport.

The major reasons for the decline in total livestock, and especially sheep and goat numbers, are associated with the transfer of animals from the state and collective farm sector into private ownership (see table 1). Privately owned animals are defined here as including both animals owned by individual households, whether those households are members of state or collective farms or any other type of agricultural enterprise, and animals owned by peasant enterprises. In 1991 there were no peasant enterprises, until after the Law on Peasant Economy was approved later that year. By the start of 1994, still only 8 per cent of total sheep equivalents were owned by peasant enterprises while 49 per cent were owned by individual households.

There are several reported reasons for a decline in total grazing livestock numbers following the privatisation or re-organisation of agricultural enterprises. First, following the redistribution of livestock, many individual households were left with too few animals to form viable herds and flocks, which were consequently treated as disposable income and a ready source of household food rather than as capital. Second, in an economy that is chronically short of cash and in which barter exchange has become a norm, sheep and sheep products are commodities that can be bartered relatively easily for essential items such as fuel, cereals, and agricultural inputs such as livestock feed, seed and fertiliser. Third, serious capital constraints have reduced the production and purchasing of winter feed, which is reported to have led to a significant degree of 'distress' slaughtering of livestock that cannot be carried through the winter.

The transfer of animals into private hands has been accompanied by the privatisation of a significant proportion of arable land formerly sown to fodder crops under state and collective farms. Production of feed concentrates and

other higher quality feeds such as silage, has declined to significantly below requirements owing to a general shortage of working capital. These factors have exacerbated the already acute winter feed shortage and have increased relative dependence on open pastures to meet animal nutritional requirements.

In spite of the overall decline in livestock numbers, standing forage from open pasture cannot meet total animal nutritional requirements, and supplementary feeds will remain essential. At the 1994 mean stocking density across the Republic, the availability of forage from open pasture expressed as a proportion of total forage demand was 82 per cent for summer pastures, 47 per cent for spring/autumn pastures, and 11 per cent for winter pastures (based on data provided by the Institute of Pastures and Forage). The respective proportions by oblast are shown in table 4. It should be noted that these estimates are based on a crude comparison of aggregate stocking densities with estimated forage availability. They do not take into account other factors such as the feeding preferences of different grazing animals.

**Table 4 Crude feed balance from open pasture by oblast at actual stocking densities, Kyrgyzstan, 1994**

Oblast	Stocking density ('000 sheep equivalents)	FA/FD summer (%)	FA/FD spring/autumn (%)	FA/FD winter (%)	Mean stocking rate, 1994 (sheep equivalents/ha)
Djalal-Abad	2355	105	51	7	1.88
Issyk-Kul	2422	72	33	10	1.77
Naryn	2446	75	51	15	0.98
Osh	3456	57	59	6	2.40
Talas	1017	217	50	22	0.88
Chu	2513	57	37	12	2.02
Republic	14209	82	47	11	1.58

Source: Institute of Pastures and Forage

Note: FA = forage availability from open pasture, FD = forage demand at given stocking densities

#### Geographical distribution of pastures

The principal determinant of the geographical distribution of various types of seasonal pasture used as common grazing in Kyrgyzstan is altitude, as described above. There is some degree of regional variation between oblasts in this respect, which can be deduced from table 4.

Osh and Djalal-Abad oblasts, in the South of the Republic, and Chu oblast in the North, have a relatively higher proportion of irrigated lowland cropping than other oblasts. Livestock production systems in these oblasts is relatively more integrated with crop production, and reliance on feed from open pasture is lower. This partly explains the higher mean stocking rates in these oblasts, compared with the Republic average of 1.58 sheep equivalents (se)/ha/yr. In Osh the mean stocking rate is 2.40 se/ha/yr, in Chu, 2.02 se/ha/yr, and in Djalal-Abad, 1.88 se/ha/yr. In particular, these oblasts are short of winter pasture, since much of the land that would once have provided winter pasture has been given over to arable cropping. The oblasts with the highest dependence on open pasture for meeting animal nutrition needs are Naryn and Talas, with mean stocking rates of 0.98 and 0.88 se/ha/yr respectively. Issyk-Kul falls somewhere in between, with mean stocking rates close to the Republic average.

High-altitude summer pastures are distributed relatively evenly throughout the Republic, but the most important areas of summer pasture are relatively few in number. They include Sary Djaz and Archialy in Issyk-Kul oblast, Ak-Sai and Song-Kol in Naryn oblast, Suusamir in Chu oblast, Chatkal in Djalal-Abad oblast, and Alai in Osh



oblast. To give an indication of the order of magnitude of these pastures, the total area of Ak-Sai (Naryn) is 520 800 ha, Song-Kol (Naryn) is 93 100 ha, and Suusamir (Chu, formerly Naryn) is 257,200 ha.

Even given the increasing relative importance of pastures in meeting animal nutritional requirements, a large proportion of distant summer pastures remain significantly underused. Indicative figures obtained from the Institute of Forage and Pastures suggest that an average of 43 per cent of total summer pastures across the Republic by area remain unused in 1994. The underuse of summer pastures varies between oblasts, ranging from 25 per cent in Naryn and Talas oblasts, to more than 50 per cent in Osh and Issyk-Kul. The main reason for this underuse of available high quality, high altitude summer pasture land is the shortage of working capital for the purchase of fuel with which to move herding families to the summer pastures, and to provide them with a limited range of support services while they are there. This constraint affects all forms of agricultural enterprise.

Owing to the underuse of distant summer pastures and the decline in availability of higher quality supplementary feed, considerable additional grazing pressure is currently being placed on pastures close to settlements, and especially on spring/autumn pastures. This is regarded as perhaps the most serious issue facing Kyrgyzstan's common pastures at present.

### **Legislative and policy framework**

The legal framework for land tenure in general comprises the Land Code, the Law on Land Reform, and the Law on Peasant Economy (all enacted in 1991), all of which represent a move towards private property yet without establishing a land market. The Land Code of the Kyrgyz Republic is currently under revision (see Bloch et al (1995) for a comprehensive discussion of the legislative and policy framework for land and agrarian reform in Kyrgyzstan).

The Constitution (5 May 1993) states clearly the principle that land shall be the property of the state, i.e. that the state reserves the right of eminent domain. Although it made possible the granting of 'rights of private possession' to 'citizens and their associations', the Constitution specifically prohibited market transactions in land rights. The Presidential Decree of 22 February 1994, 'On measures to intensify the land and agrarian reform in the Kyrgyz Republic' further specified that use rights may be held by citizens and juridical persons over plots of arable and hay land for up to 49 years, and for the first time provided for a market in such land rights to develop.

The legal framework specific to pasture land tenure and management also begins with the above framework. Under the Decree, 'On measures to intensify the land and agrarian reform in the Kyrgyz Republic' pasture land may be leased on a short-term or long-term basis, on terms to be laid down by the Ministry of Agriculture, with priority given to existing shepherds and herders. The 12 September, 1991, Decree 'On regulations governing the provision and use of close and distant pastures in the Kyrgyz Republic' defines 'short-term' as a period of up to 5 years, while 'long-term' refers to a period of up to 10 years. Under this decree, pasture land is allocated to agricultural enterprises for long-term use for up to 25 years.

The 1991 Decree, 'On regulations governing the provision and use of close and distant pastures', also established for the first time the principle that pasture land use requires payment to be made. The 22 February, 1994, decree 'On measures to intensify land and agrarian reform' requires that existing levels of pasture land taxes be increased twenty-fold. Other provisions under the 1991 decree on pasture land allocation and use specify the responsibilities of land users and the relevant authorities, and specifically prohibit the sale, mortgage or other transactions in pasture land. Another decree approved in 1991 concerned the regulations for moving livestock through the territory of the Kyrgyz Republic.

### **Current arrangements for grazing land allocation and management**

During the period of collectivised agriculture, grazing land was allocated to state farms and collectives according to 'demand', i.e. the existing and future planned number of grazing animals. Land allocation was carried out on the authority of the local Soviet (rural council) for enterprises within its jurisdiction. As of mid-1994, this was still, in principle, the system that operated, although there is now a wider range of types of agricultural enterprise.

including cooperatives, joint-stock companies, individual peasant enterprises and associations, as well as the remaining state farms and collectives.

Individual peasant enterprises comprise either single families, or a small group of families who are likely to be related. For example, the herders of one peasant enterprise interviewed in their summer pastures in Ak-Suu raion, Naryn oblast, were the sons of three brothers who, with their families, made up the overall peasant enterprise. Peasant enterprises who keep animals normally do so as a small part of their overall operation. As they are at best 'part-time' herders, they tend not to take their own animals to pasture. Instead, a group of peasant enterprises, like individual households, will club together to pay a herder or shepherd to take their livestock to pasture. One shepherd interviewed in Djeti-Oguz raion, Issyk-Kul oblast, for example, was responsible for the summer grazing of a total flock of 600 sheep, owned by 36 separate households, and 110 cattle, owned by 60 different households. The fee paid to the shepherd by each household was 6 som/sheep. The shepherd assumes responsibility for paying the pasture land tax element out of this gross income.

The leader of the relevant local agricultural enterprise has the final say as to which pasture areas should be used, but each shepherd will normally use the pastures he/she knows best, and there is considerable flexibility in practice over the choice of pasture sites. If two shepherds wish to use the same pasture site, and it is felt there is not sufficient grass for both to use, priority would go to the more experienced herder, or the one who has used it for the longest period. In the case of any dispute, the leader of the enterprise (or, under proposed reforms, of the rural committee) would decide.

From interviews with many herders, it appears almost inconceivable that there would be overt disputes over grazing between herders within the same enterprise, but it is possible to imagine disputes between neighbouring enterprises or (more likely) raions. For example, Naryn raion (then called Tien-Shan) leased pasture land to Kochgor raion around 15 years ago. The Kochgor herders are now used to these pastures, and are very unwilling to see them revert to Naryn raion. Individual herders know nothing of the paperwork, and understand only historical precedent; the basis of the original agreement is often all but forgotten, whether short-term, long-term, or permanent. In general, if there are disputes between enterprises within a single raion, they are resolved at raion level, in the case of disputes between raions, at oblast level. In both cases, the administration akim makes the final decision, based on submission of evidence prepared by the local land inspection service.

Shepherds and herders are allocated pastures by the relevant agricultural enterprise (state or collective farm, cooperative, association of peasant enterprises) according to the number of animals in their care, and rely on the enterprise for transport to summer pastures, which they pay for out of the gross income received from the livestock owners. There is little possibility or incentive for individual herders to insist on using distant summer pastures, and considerable incentive for them to save on the cost of transport and seek to use pastures closer to settlements, including spring/autumn pastures.

These arrangements for the use of common pastures in contemporary Kyrgyzstan exhibit characteristics of both P/C and T/R modes of group operation, although P/C type relations remain dominant. As might be expected of family-based farms, trust and reciprocity play a significant role in the operation of peasant farm enterprises. There is some collective action among peasant farm enterprises in arranging for the joint summer pasturing of their livestock. Shepherds at the *jailoo* (high-altitude summer pastures) are allowed to use considerable discretion and skill in their choice of pastures, drawing on their knowledge and experience. Yet the power and control of the large farm enterprises that have superseded the collectives remains powerful, and by continuing to insist on allocative decision making they tend to quash local initiative. The system of common pasture management is likely to become increasingly important for livestock production in Kyrgyzstan, but does not yet meet the conditions required for success.

### III CASE 2: LAND AND AGRARIAN REFORM AT DISTRICT LEVEL, UZBEKISTAN

The actual implementation of land and agrarian reforms in Central Asia differs widely between regions (*oblasts*), between districts (*raions*), and between former state or collective farm enterprises within individual districts. In a

hierarchically controlled system in which legislation and policy is handed down from above in the form of government and Presidential decrees as in Uzbekistan and Kyrgyzstan the way the reform process is played out in practice depends on the relative power and influence of various local constituencies over the administrative officials responsible for implementing the reforms. The nature of these constituencies varies considerably from one locality to another, as do the personalities and competencies of the officials in question. The district is a useful unit of analysis for understanding such processes in Uzbekistan since the power and personal disposition of the district *khokim* (governor) is an important determinant of the pace and character of practical reforms.

Here we describe the practical progress made with land reform and farm restructuring for Bulungur district, Samarkand oblast, Uzbekistan, over the period 1990-96. We focus particularly on the new peasant farms and the severe structural constraints to production they currently face. For purposes of comparison data are also presented for the oblast as a whole. In terms of both land use and 'pre-reform' farm enterprise structure, Bulungur is somewhat atypical. Most significantly, virtually no cotton is grown in Bulungur District. Approximately half of the district's total agricultural land area of 56,562 ha is irrigated. The principal uses of agricultural land are arable crops and vegetables including wheat, maize for silage, potatoes and onions (51% of agricultural area), perennial tree crops including vineyards and fruit orchards (17% of agricultural area), and pasture land (32% of agricultural area). The information presented here is based on semi-structured interviews with farm managers, specialists, and farm workers/members on visits to a range of farm enterprises in Bulungur District during September 1995 and March-April 1996.

### Progress of land reform in practice

A useful indicator of achievements in land reform to date is the proportion of total farm land that has been transferred to cultivators. The relevant indicators are the proportions of farm land transferred to 'subsidiary' or household farm plots and to peasant farms (differences between the various types of farm enterprise are described below). Care is required with interpreting these data, since in available statistical records, landholdings of leasehold peasant farms and private subsidiary plots are included in the totals for other (state, collective and cooperative) farm enterprises. Tables 5 and 6 compare the changes in agricultural landholdings for Samarkand oblast and Bulungur District over the period 1990-96. The share of farm land held by agricultural enterprises of different types over the same period is shown in Tables 7 and 8.

**Table 7: Share of farm land by type of enterprise, Samarkand oblast, 1990-96 (%)**

Type of farm enterprise	1990	1991	1992	1993	1994	1995	1996
State	78	78	68	70	67	3	3
Collective	21	21	31	29	31	25	20
Cooperatives, etc	0	0	0	0	0	71	76
Subsidiary	1	1	1	1	1	1	1
Other	1	0	1	0	0	0	0
Independent peasant	0	0	0	0	0	1	1
Leasehold peasant	0	0	0	1	1	2	3
Private plots	4	4	7	5	5	5	6

Source: Department of Land Affairs, Samarkand oblast

Note: Totals add to more than 100% because private plots and leasehold peasant farms are included in totals for other farm enterprises

For Samarkand oblast as a whole 78% of farm land was held by state farms in 1990, and 21% by collective farms. Private farm plots included in these totals, made up 4% of total agricultural land. By 1996, the share of farm land held by state farms had declined to just 3% with 20% held by collectives and 76% by new cooperative-type farm

enterprises Peasant farms established between 1993 and 1996 made up a total of 4% of farm land and private subsidiary plots had risen to 6% of total farm land

**Table 8: Share of farm land by type of enterprise, Bulungur District, 1990-96 (%)**

Type of farm enterprise	1990	1991	1992	1993	1994	1995	1996
State	99	99	99	96	66	0	0
Collective	0	0	0	2	31	30	32
Cooperatives, etc	0	0	0	0	0	66	64
Subsidiary	0	0	0	0	0	0	0
Other	1	1	1	1	0	1	1
Independent peasant	0	0	0	1	1	2	2
Leaschold peasant	0	0	0	2	4	6	10
Private plots	5	6	6	7	7	7	7

Source: Department of Land Affairs, Samarkand oblast

Note: Totals add to more than 100% because private plots and leaschold peasant farms are included in totals for other farm enterprises

There are some significant differences in the situation in Bulungur District. In 1990, 99% of farm land was held by state farms, including private household plots amounting to 5% of the total area. By the beginning of 1996, the former state farms, by now re-organised as collectives, cooperatives and 'leased' collectives, still retained 96% of total farm land. Within this total however, leaschold peasant farms held 10% of total farm land, and private plots accounted for an additional 7% of farm land. In January, independent peasant farms made up 2% of total farm land, lying outside the territory of the collective farms but this proportion has since been re-integrated with collective farm land. In sum, around 17% of total farm land has been transferred to cultivators themselves, although severe structural constraints mean that peasant farmers are strongly limited in the degree of freedom they can exercise in the use of their land.

#### *Farm size distribution*

Table 9 shows the change in mean size of farms in Bulungur district by type of farm enterprise, over the period 1990-96. The major type of farm enterprise existing in 1990 were state farms, with average landholdings of 5 079 ha. State farms did not change very much in size until they were all re-organised around 1994-95. Collective farms established from 1993 onwards were on average around half the size of the state farms. This figure is somewhat inflated by the inclusion of three farms with significant unirrigated and pasture areas. These three farms have per capita landholdings of 36 ha, 19 ha and 27 ha respectively, as compared with the average per capita landholding of 2.4 ha for the remaining 14 collective farms in the district which specialise in irrigated horticultural crops (vineyards, fruit orchards and other vegetables). The 'leased' collectives, essentially state farms renamed during 1995, are slightly larger than the average collective farm, with mean landholdings of 3,730 ha. The independent peasant farms established in Bulungur were anomalously large (around 300 ha on average), and have since been abolished or 'reorganised'. Leaschold peasant farms, the only true family-based farms in Bulungur, grew in mean size from an initial 3 ha in 1993 to around 14 ha in 1994 and have remained consistently of this size since then. Private subsidiary plots, as laid down in the Law on Land, are on average 0.2 ha each.

At a more detailed level, Table 10 shows total leaschold peasant farm holdings within the territory of collective farms in Bulungur district for the beginning of 1996, and leaschold landholdings per capita. There is considerable variation at local level (i.e. between collective farms) in the share of total farm land allocated to leaschold peasant farms. At one extreme lies Gubdin, with only 2% of total land allocated to peasant farms, while some farms (e.g. Dustlik, Forty Years of Victory) have allocated around 30% of their total area to peasant farmers. Per capita landholdings on peasant farms also vary widely, according to the availability of land in the relevant *kishlak*.

(settlements) The range of variation for irrigated land is generally between 1 ha and 3 ha per capita. For the leasehold peasant farms on Hujamazgil farm who mainly keep livestock and have non-irrigated and pasture land per capita landholdings are around 14 ha

**Table 9: Mean farm size by type of farm enterprise, Bulungur District, 1990-96 (ha)**

Type of farm enterprise	1990	1991	1992	1993	1994	1995	1996
State	5079	4436	4435	4271	4657	4650	n a
'Leased'	n a	n a	n a	n a	n a	n a	3730
Collective	n a	n a	n a	1947	2817	2817	2213
Subsidiary	19	29	20	20	27	27	18
Other	75	150	80	80	58	58	50
Independent peasant	65	67	76	212	445	445	328
Leasehold peasant	n a	n a	3	10	14	14	12
Private subsidiary	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Source: Land Use Planning Officer, Bulungur district

For purposes of comparison, Table 11 shows the landholdings of peasant farms by district for Samarkand oblast as a whole. Both independent and leasehold peasant farms are included. The mean size of such farms varies widely from district to district, according to variations in land use, population density, and the way the policy and legislative framework is interpreted by local khokims and their officials. The total share of farm land allocated to peasant farms varies between 1% and 9% (Bulungur lies at the latter extreme). The mean size of independent peasant farms ranges from 3 ha in Pakhtachi District to 11 ha in Narpai (with the exception of one farm of 138 ha in Urgut District). The mean size of leasehold peasant farms ranges from 3 ha in Tailak District to 21 ha in Pararik (with the exception of five livestock farms in Pastdargom District with non-irrigated and pasture land). For the oblast as a whole, the mean size of independent peasant farms is 7 ha, and that of leasehold peasant farms 11 ha.

#### Farm enterprise restructuring in Bulungur District, 1990-96

Prior to 1990, all farm enterprises in Bulungur District were state farms. The first significant reforms began in 1990 following the passage of the Law on Peasant Farms, but the basic structure of the major farm enterprises remained unchanged until 1992. Although peasant farms began to be established in the district from 1990-91, these were not recognised as peasant farms in oblast statistics until 1993. The number of independent peasant farms increased gradually over 1993-96 from three to six, while the number of leasehold peasant farms rose from 130 in 1993 to 471 by the start of the 1996. In 1993/94, six state farms were 're-organised' as 8 collective farms, and in 1995, the remaining 10 state farms were renamed as cooperatives or 'leased collectives'. By the start of 1996 then there were no state farms in Bulungur, but there were 11 collective farms, 12 cooperatives/'leased collectives', six independent peasant farms, and 471 leasehold peasant farms (see tables 5 and 6).

#### Collective farm enterprises

Three types of collective farm are said to exist in Bulungur District: collectives, so-called 'lease' collectives, and cooperatives. In spite of these differences in name, it has not been possible to find anyone within Agrofirma (the 'agroindustrial complex', or local equivalent of the government department of agriculture), the khokimiat (governor's office), or the farm enterprises themselves who is able to explain the differences in legal status between these types of collective farm, even in principle. It is not clear, for example, whether the actual distribution of shares among members of these enterprises is known.

Two types of land tenure arrangement may co-exist on the territory of any collective farm, regardless of its stated type (e.g. collective or 'leased' collective). These are leasehold peasant farms, on the one hand, and sharecropping arrangements with the farm management on annually negotiated terms, on the other. Leaseholders, at least in principle, have a greater degree of freedom in where to market their produce and where to obtain inputs and services. In practice, for both types of farm worker, the farm management generally arranges the marketing of produce in return for inputs and other services.

#### *Independent peasant farms*

The first independent peasant farm in Bulungur District was formed in 1990, and there has been a gradual increase in their number since then. The maximum number was reached in September 1995 when there were a total of 12 in Bulungur District. However, of the three independent peasant farms visited in September 1995, it appears that on the whole these enterprises tended to replicate the internal management structure of collective farms, albeit on a slightly smaller scale. For example, they retained an administrative staff including accountants, agronomists and the like. Individual farm members, who may or may not have rights over a specific parcel of land, tended to relate to the farm management through some form of sharecropping arrangement. This does not mean that there is no relationship between work effort and reward received; however, members of the longest established independent peasant farm explained that this was perhaps the main reason why they prefer present arrangements over those prevailing under the former state farm. The small size and relatively long period of operation of this farm (5 years) perhaps made this experience an exception rather than the rule.

Since the beginning of 1996, all the independent peasant farms in Bulungur district have been 're-organised' as cooperatives or re-integrated into collective farms. Since peasant farms are intended to be family farms, the large size of these farms was regarded as a violation of the Law on Peasant Farms. The six independent peasant farms in Bulungur District in January 1996 had average landholdings of 328 ha at the start of 1996, compared with the mean landholding of 12 ha for leasehold peasant farms. The average size of independent peasant farms in Samarkand oblast as a whole in January 1996 was a mere 7 ha.

#### *Leasehold peasant farms*

At the beginning of 1996, there were 471 leasehold peasant farms in Bulungur district, existing on the territory of various collective farm enterprises. These have increased in number from 130 at the start of 1993, 155 in 1994, and 224 in 1995. The mean landholdings of leasehold peasant farms in Bulungur District have remained consistently in the order of 12-14 ha over the last three years (see table 9). This matches closely the oblast average of 12 ha (1996).

A typical leasehold farm, "Uedus", has 8 ha of irrigated land farmed by 8 workers from 3-4 related families. Its capital assets include a tractor (purchased for 100,000 sum), a cart, a plough/rotivator, and a glasshouse in which lemons and tomatoes are grown. Land has formally been leased from a collective/leased farm for three years, but lease payments began to be collected only in the third year of operation owing to the two-year grace period for newly established peasant farms. Leaseholders are free to market their produce wherever they like, but in practice, under the economic conditions currently prevailing, they have little choice but to opt for a sharecropping arrangement with the collective farm, in the expectation that they will benefit from the access to markets, transport, and other inputs and services that the collective farm may provide.

#### *Dispossession of peasant farmers after 1995 harvest*

By the beginning of March 1996, not only had all the independent peasant farms in Bulungur been abolished because they were not true family farms, but around 50 leaseholders (10% of the total number) had also been dispossessed. It is instructive to examine the reasons for this decline in number of peasant farms and the process by which it was brought about, as they tell a great deal about the lack of security of tenure experienced by peasant farmers in Bulungur District, and the structural disadvantage at which they are placed by comparison with other types of farm enterprise. For those recently closed peasant farms visited by author, the reasons stated by those

responsible for taking the decision to close the farms are somewhat at odds with the perception of the farmers themselves

On taking over office the new khokim of Samarkand oblast ordered an inquiry into the affairs of peasant farms, having received reports from banks stating that peasant farms were not using their bank accounts<sup>4</sup>. Specialists and officials interviewed reported that this concern is related to the issue of taxation of agricultural production. They worried that peasant farmers are 'working only for themselves not for the state'. They tend to emphasise those aspects of the legislative framework that insist on peasant farms carrying out transactions with collective farms and processing factories by bank transfer, and wanted 'to ensure that actual practice is in line with legislation'. However, it appears that a number of collective farm managers have seized this opportunity to close peasant farms, by exploiting Article 13 of land law which states that if land not being used properly it should pass to those who will use it properly (i.e. the collectives themselves).

District khokims have responded to the oblast khokim's directive in different ways. In Pastdargom District, for example, no peasant farms have been closed. In Bulungur District, a Commission was established to investigate the affairs of all leasehold peasant farms<sup>5</sup>. The Commission visited all collective/leased farms, and inspected records of all peasant farms as submitted by farms themselves. Meetings were held with the director and economist of each farm, at which peasant farmers called. It was decided to investigate only the least 'profitable' farms i.e. those with lowest yields according to the accounts submitted, as recommended by the Board of Management of the farm to the khokim. It is also reported that directors of farms are asked to make an assessment of the farms based on their personal assessment of the heads of those farms, which raises deep concerns about possible abuses of power by farm managers. There are some safeguards against this however, as the district khokim orders all cases to be investigated by the Association of Peasant Farms and the state tax inspection. For example, five peasant farms were recommended for closure on one collective farm but on further investigation by the Association of Peasant Farms, all were found to be perfectly in order and were kept open.

The reasons given for closure of peasant farms were all based on the grounds for termination of activities of peasant farms contained in Article 23 of the Law on Peasant Farms:

1. Insolvency and failure to use bank accounts for financial transactions
2. Failure to fulfil production quotas
3. Voluntary cessation of activities

However, according to the members of the Bulungur Commission interviewed, these general grounds were not translated into specific criteria that could transparently be applied in all cases. Such criteria would include, for example, a guideline on what threshold of non-fulfilment of planned production would be regarded as grounds for termination (e.g. 5% below plan production, or 50%?). There seems to have been no consistency between and even within farms as to how this general criterion was applied. Moreover, none of the peasant farmers interviewed who had been closed down owing to 'voluntary cessation of activities' had actually requested that they give up their land leases, and some were not even aware that they had been closed down. The grounds of insolvency is also a moot point in certain cases, since it was reported by some farmers that they had offered to pay cash to obtain inputs from state enterprises and collective farms, but had been refused.

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<sup>4</sup> It is a measure of the lack of trust at all levels of Soviet-influenced Uzbek society that merely to have one's own bank account should be regarded as a major concession to individual freedom. The heads of new peasant farms are among the first individuals in rural areas actually to hold bank accounts since the demise of the USSR. Even then, as an attempt to control inflation by limiting the circulation of money, current laws prohibit the withdrawal of cash from one's own bank account. Payments may only be made by bank transfer to approved organisations.

<sup>5</sup> The Commission was made up of the First Deputy Khokim, the Deputy Chief of Agrofirma, the district Land Use Officer, the Head of the Association of Peasant Farms, the local representatives of the State Tax Inspection, State Insurance Board, and Tadbirkor Bank, and the District Notary.

despite some structural constraints peasant farms report a higher yield

### Constraints faced by peasant farms in Bulungur

Apart from those cases in which collective farm managers appear to have abused their powers to bring about a transfer of land from peasant farms back to the collective farms, there are many structural constraints experienced by Bulungur's peasant farmers which place them in a highly vulnerable position, and at serious risk of losing their land leases

Structural constraints

① According to the Law on Peasant Farms, peasant farms have a free choice of what crops they may grow. But in practice they are required by the terms of their contracts with collective farms to grow particular crops under sharecropping arrangements. The range of crops for which they are required to deliver a large proportion of production to the collective farm greatly exceeds the legal requirement, which is only to deliver 50% of planned wheat and cotton production for the state order. However, individual peasant farmers have little or no bargaining power to negotiate better contracts with collective farms, or to insist on being able to use cash for transactions rather than a share of their product. They have little choice but to comply with the contract terms set by the collective farms and processing factories, because of the monopsonistic position of those enterprises as the main source of inputs, and their monopolistic position as the only viable market for many products.

② Collective farms and processing factories are themselves chronically short of cash, and many are reported to be on the verge of technical bankruptcy (but not actual bankruptcy since the state continues to allow them to roll forward their debts). The main losers in this situation are the peasant farmers, who face lengthy delays in payment for their produce. Many farmers interviewed had not received payment for several years, receiving only payment in the form of consumer goods or such production inputs as the collective farms decide to give them. Owing to a lack of cash, many if not most peasant farmers are unable to purchase essential inputs except by making payments in kind from their farm production, or by pledging a share of the next year's harvest. They may alternatively sell produce privately in the bazaar in order to obtain cash. In either case, they are left with too little of their total production to be able to satisfy their contracted production quota with collective farms or processing enterprises. This places the peasant farms at risk of being dispossessed on the grounds of non-fulfilment of production targets.

③ Other commonly mentioned structural constraints prevent peasant farms from realising their planned production in the first place. For example, many peasant farmers interviewed felt they had been allocated the worst land by their collective farms (e.g. poorly drained or poorly irrigated). Peasant farms are given lowest priority in gaining access to machinery from collective farms, and often receive assistance only from machinery in poor repair. Lengthy delays in getting access to machinery leads to late sowing or harvesting and consequently lower yields. Peasant farmers have no good sources of information or advice about possible technical options or market opportunities that may be open to them. In sum, peasant farms not only lack positive support, but they operate within an environment which is hostile to them.

From discussions held with specialists in Samarkand, it is reported that a major reason for the recent slow-down in the rate of establishment of peasant farms is that they are increasingly seen as jeopardising the ability of collective farms to meet state orders for wheat and cotton. Peasant farms were originally intended as livestock producing farms, and Presidential decrees aimed at deepening reforms in livestock production were largely aimed at peasant farms (it is reported that 85% of livestock in Bulungur are now held by peasant farms). But the recent drive to increase grain production in Uzbekistan has meant that peasant farms are now being pushed by the collective farms on which they substantially depend into grain production. The consequent reduction of feed crop production has led to a rapid decline in livestock numbers. The suggested reason why so many peasant farms are now being closed is that collective farms are looking for ways to increase their own wheat/cotton production in order to meet their own increasing obligations to the state. Bulungur District is actually in a relatively favourable situation, since it has no cotton, and so has a freer choice of crop mix than in many other districts.

### Comparative performance of collective and peasant farms

④ In spite of the many structural problems faced by peasant farms described above, it is most significant that peasant farms still manage on average to obtain higher crop yields than collective farms. Disaggregated data were obtained from Agrofirma (for collective farms) and the Association of Peasant Farms (for peasant farms) of mean yields per



hectare for three major crops in Bulungur District, selected to represent a range of production conditions (e.g. more/less mechanised). Disaggregated data are available only for 1994 and 1995, the two years the Association of Peasant Farms has been in existence.

Overall, the data show that peasant farms obtained mean crop yields some 15%-25% higher than those of collective farms. For wheat, peasant farm yields were 15% higher in 1994 and 19% higher in 1995. For potatoes, peasant farm yields were 7% higher in both years. For grapes, peasant farm yields were 52% higher in 1994 and 19% higher in 1995. The 1994 grape harvest in Bulungur was very poor overall, owing to a severe late frost. The harvest was only 12% of planned production for the district as a whole. But peasant farms managed to withstand this shock much better than collective farms, and managed to achieve 26% of plan fulfilment, more than twice the district average. These data strongly support the hypothesis that farms based on the use of family labour have much stronger incentives to maximise the efficiency of labour than do collective farms. This more than any other single fact provides a strong case in favour of continuing and intensifying the land and agrarian reform programme.

This account of the ongoing land and agrarian reforms in a single district of Uzbekistan illustrates the very real lack of the 'social capital' that seems necessary to make the reform process work. The P/C mode of operation is so strongly prevalent throughout society, and is reinforced by historically evolved norms, that efforts to expand individual freedoms and devolve control over economic decisions to individual farming families are currently being stymied. A resource-based theory of power does not fully explain the reluctance of many collective farm managers to loosen their grip over agricultural production. The once-controlling party hierarchy is at least outwardly banned. Collective farms themselves are so chronically short of cash that they would benefit more from allowing peasant farmers to purchase inputs from them in cash rather than in kind. Yet the ingrained norms that lock farm enterprises, input suppliers and output markets together by means of in-kind transactions prevent this from taking place, at considerable cost to both peasant farmers and even the collectives themselves. As the legislative and policy framework edges towards making ever more concessions to private enterprise, the collective farm system appears to be retrenching. Although the legislative and policy framework for land and agrarian reform in Uzbekistan is moving in the direction of greater liberalism, the way the reforms are implemented in practice shows how far P/C modes of group operation need to be relaxed in order for T/R relations to be relied upon to deliver the stated objectives of the reform programme.

#### IV DISCUSSION AND CONCLUSION

The empirical cases above suggest that land and agrarian reforms in post-Soviet Central Asia will fail to meet the objectives of increasing agricultural productivity, expanding private initiative, and allowing for the sustainable management of natural resources unless institutions at all levels of society relax the grip of power and control, and instead foster trust and reciprocity. We began with two dilemmas. First, the language of collective action is unfortunately associated in the former Soviet Union with the failed experience of agricultural collectivisation, thus hindering productive debate. Second, while norms of trust and reciprocity are urgently needed to make agrarian reforms work, they appear to be sadly lacking in wider society itself. It is almost a contradiction in terms to suggest that public policy might be able to help build social capital in society, since in the post-Soviet context it is the structure of public administration that has done so much historically to erode social capital. Yet this appears to be one promising direction for future research, in order to identify possible sources of social capital on which to build

For example, in parallel with the rural Soviets (councils of people's deputies) in Uzbekistan was another, more informal system of social leadership and power. The *makhalla* is literally a block of private houses, and traditionally had its own committee for self-administration, usually centred around the local tea-house (*charkhana*). It performs various social and ritual functions during ceremonies such as marriages, funerals, and the celebration of religious holidays. It usually has its own collective property for preparing feasts, which may also be borrowed by members for their own use. The *makhalla* also plays a role in resolving local disputes and, more recently, is being used as the chief means to channel social welfare payments to low-income families under the national poverty alleviation programme. This institution is not equally strong throughout the republic, however. Although it plays an important role in the Tashkent region and in the densely populated Fergana valley, it is much less prevalent in the regions of Samarkand and Bukhara (Zholdasov 1996).

The *makhalla* may be contrasted with the newly created Associations of Peasant Farms (APF). In their conception the APFs are intended to be institutions of civil society, providing services and pressing claims on behalf of their members. Such services offered to peasant farms include assistance in preparing quarterly financial reports for banks and tax returns to the inland revenue, assistance in gaining access to fuel, fertiliser and other inputs, according to the hectareage of each farm, acting as broker in arranging barter trade between leasehold farms, or between leasehold peasant farms and other enterprises and organisations, and acting as broker in arranging for the hire of machinery or equipment owned by other peasant farmers or collective farms<sup>6</sup>. However, the APFs were formed by government decree and are often physically located within the *khokimat* (local administration). Peasant farms contract with the Association to receive these services over an initial 10 year period, in return for a 3% share of gross sales revenue, submitted annually to the Association by bank transfer. In practice, the APFs do not have the capacity or the resources to deliver these services to more than a very small proportion of peasant farms. No peasant farmer interviewed in Bulungur district had received any support services from the Association. At present owing to these resource constraints, the activities of the Association are geared more towards reporting upwards to oblast and republican levels than to supporting its member farms.

The presence of social capital - norms of trust and reciprocity, but not necessarily equality - is relatively strong in the *makhalla*, but virtually absent from the Association of Peasant Farmers. An important precedent was established by using the *makhalla* as a vehicle for social welfare policy, but there is no reason why the same could not be true for institutions involved more directly in land and agrarian reforms. Experience from the common property resource management literature suggests that building social capital is a function of history and contingency, the relatively small size and stability of groups and prevailing social norms. Perhaps the most promising avenue for further research with those responsible for policy making in Central Asia's land and agrarian reform process is to open up a debate around such issues as what are the institutional underpinnings of 'true' commons, and how these should be distinguished from the Soviet experience of agricultural collectives. Unless this debate can be opened up, there is a danger that the unbridled market model may help perpetuate "a social and institutional history which is unfavourable to good group behaviour" (Stewart 1996: 23).

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<sup>6</sup> Some of the machinery and equipment of collective farms was privatised and distributed to peasant farms, peasant farms have also purchased other capital assets directly on the open market.

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Table 5.26

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Table : Farm enterprise structure and agricultural landholdings, Samarkand oblast, 1990-96

Year	State farms		Collective farms		Cooperatives, etc.		Subsidiary farm enterprises		Other farm enterprises		Independent peasant farms		Leasehold peasant farms		Private plots	
	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)
1990	85	975,180	110	266,242	0	0	169	7,893	32	6,311	0	0	0	0	267,991	44,879
1991	93	982,916	127	270,715	2	90	158	8,381	27	6,085	0	0	0	0	298,374	50,881
1992	94	612,176	142	276,011	3	110	138	8,121	29	5,646	0	0	0	0	315,967	59,582
1993	67	883,383	197	373,019	6	587	149	9,265	29	2,183	12	658	994	9,691	330,365	61,678
1994	80	848,641	193	396,503	7	5,593	168	10,993	38	2,967	299	3,858	1,361	11,598	352,550	65,843
1995	5	35,072	117	309,033	159	888,532	171	10,450	62	3,364	962	7,335	2,360	25,879	365,058	68,080
1996	3	34,544	78	243,531	215	947,206	149	8,570	72	3,574	1,281	9,030	3,107	35,779	365,143	69,903

Source : Department of Land Affairs, Samarkand oblast

Note 'Cooperatives etc' refers to all renamed state/collective farm enterprises. These are not separately distinguished in records of Samarkand Oblast Department of Land Affairs.

Table : Farm enterprise structure and agricultural landholdings, Bulungur rayon, 1990-96

Year	State farms		Collective farms		Cooperatives, etc.		Subsidiary farm enterprises		Other farm enterprises		Independent peasant farms		Leasehold peasant farms		Private plots	
	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)	No.	Area (ha)
1990	14	56,938	0	0	0	0	7	125	2	338	0	0	0	0	16,015	2,892
1991	16	56,337	0	0	1	65	6	166	2	357	0	0	0	0	17,196	3,233
1992	16	56,698	0	0	0	0	4	46	2	322	0	0	0	0	18,410	3,519
1993	16	54,528	1	1,238	0	0	4	46	2	322	3	494	130	1,303	20,107	3,774
1994	10	37,471	8	17,639	0	0	7	231	1	222	4	801	155	2,076	20,099	3,882
1995	0	0	8	17,103	10	37,249	7	170	8	404	4	1,319	224	3,120	20,842	3,982
1996	0	0	11	18,271	12	36,162	9	144	8	342	6	1,345	471	5,451	21,210	4,023

Source : Department of Land Affairs, Samarkand oblast

Note 'Cooperatives etc' refers to all renamed state/collective farm enterprises. These are not separately distinguished in records of Samarkand Oblast Department of Land Affairs.

Table 10

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Table : Leasehold peasant farm holdings within territory of collective farms, Bulungur raion (1 Jan 1996)

Name of collective farm	Collective farm total area (ha)	No. leasehold peasant farms	Total area (ha)	Mean area (ha)	Share of collective farm total area (%)	No. workers	Area per worker (ha)
Kildon	1096	8	54	6.8	5	84	0.6
Bulungur	8704	27	381	14.1	4	211	1.8
Dustlik	3758	67	1018	15.2	27	910	1.1
F.Yuldash	3528	17	309	18.2	9	123	2.5
Minchinor	2088	6	93	15.5	4	49	1.9
Forty Years of Victory	2657	46	816	17.7	31	290	2.8
Navoi	2450	18	99	5.5	4	126	0.8
A Makhsunov	1946	44	451	10.3	23	317	1.4
Ulugbek	1965	11	107	9.7	5	130	0.8
Ipak Yuli	2634	57	374	6.6	14	368	1.0
Uzbekistan	2440	10	83	8.3	3	77	1.1
H Olimjon	2663	39	350	9.0	13	381	0.9
Olkartepa	2499	29	167	5.8	7	221	0.8
Hujamazgil	6331	18	667	37.1	11	48	13.9
Gubdin	18197	25	287	11.5	2	220	1.3
Yangiobod	270	1	15	15.0	6	7	2.1
Beruniy	601	24	148	6.2	25	73	2.0
Kattatilan	661	7	24	3.4	4	22	1.1
Beshkubi	1084	9	89	9.9	8	62	1.4
Olmazor	686	4	24	6.0	3	17	1.4
Nyazmat	670	3	13	4.3	0	19	0.7
Birlık	484	1	10	10.0	2	4	2.5
Total	67412	471	5579	11.8	8	3759	1.5

Source: Land Use Planning Officer, Bulungur district

Table : Landholdings of peasant farms in Samarkand oblast, by rayon (1 March 1996)

Name of rayon	Agricultural land area (ha)		Main agricultural activity	Total no. peasant farms	Total area (ha)	Share of total ag. area (%)	Independent peasant farms					Leasehold peasant farms				
	total	irrigated					No.	Area (ha)	Mean size (ha)	Arable land (ha)		No.	Area (ha)	Mean size (ha)	Arable land (ha)	
										Irrig.	Non-Irrig.				Irrig.	Non-Irrig.
Bulungur	56,562	25,125	fruit & vegetables	425	5,363	9	0	0	0	0	0	425	5,363	13	3,152	635
Guzalkent	26,010	20,297	cotton	129	767	3	84	525	6	510	6	45	242	5	242	0
Jambai	34,809	25,476	cotton	361	1,394	4	1	5	5	5	0	360	1,389	4	1,108	281
Ishtikhon	52,564	25,687	cotton	367	2,721	5	87	805	9	299	428	280	1,916	7	830	994
Katta-Kurgon	109,522	30,179	cotton	254	2,373	2	120	1,146	10	914	232	134	1,227	9	646	581
Narpai	29,188	23,503	cotton	274	2,504	9	177	1,934	11	1,420	74	97	570	6	523	0
Nurobod	414,703	4,001	livestock & grain	810	12,482	3	0	0	0	0	0	810	12,482	15	232	10,361
Akdariya	24,554	22,899	cotton	205	1,232	5	0	0	0	0	0	205	1,232	6	1,232	0
Pastdargom	32,124	26,055	cotton	287	1,952	6	282	1,767	6	1,656	111	5	185	37	0	111
Pakhtachi	111,867	20,339	livestock & grain	461	1,484	1	461	1,484	3	983	0	0	0	0	0	0
Paizak	76,966	17,879	cotton	148	2,936	4	11	91	8	91	0	137	2,845	21	666	1,034
Samarkand	27,092	15,018	fruit & vegetables	42	317	1	20	181	9	114	0	22	136	6	122	5
Tailak	16,778	14,498	fruit & vegetables	77	275	2	7	31	4	21	0	70	244	3	188	0
Urgut	75,192	23,953	tobacco & grain	73	1,515	2	1	138	138	0	6	72	1,377	19	1,023	83
Chelek	27,280	17,085	cotton	142	1,272	5	7	78	11	62	16	135	1,194	9	522	610
Kushrobod	191,823	3,064	livestock & grain	147	2,765	1	8	145	18	0	70	139	2,620	19	162	2,399
Totals	1,307,034	315,058		4,202	41,352	3	1,266	8,330	7	6,075	943	2,936	33,022	11	10,648	17,094

Source: Department of Land Affairs, Samarkand oblast