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Research Paper

LAND AND AGRARIAN REFORM IN THE KYRGYZ REPUBLIC

edited by

**Peter C. Bloch,
James M. Delehanty,
and Michael J. Roth**



**LAND
TENURE
CENTER**

An Institute for Research and Education
on Social Structure, Rural Institutions,
Resource Use and Development

Land Tenure Center
1300 University Avenue
University of Wisconsin-Madison
Madison, Wisconsin 53706

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All views, interpretations, recommendations, and conclusions expressed in this paper are those of the authors and not necessarily those of the supporting or cooperating institutions.

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Peter C. Bloch
Project Director
12 September 1995

PREFACE

The Kyrgyz Republic (KR) is transforming its agricultural sector from the command system of the Soviet era to market-oriented production and trade. Fundamental to this effort is farm privatization and restructuring: dismantling the 442 large-scale state and collective farms that in 1990 accounted for virtually all of the country's agricultural output and replacing them with smaller-scale farms managed by individuals, families, groups of families, and corporate farm enterprises. Farm restructuring began in 1991, but progress was fitful until 1994, when the Ministry of Agriculture and Food (MAF) declared its intent to transfer nearly all of the country's 1.5 million hectares of arable land to smallholders by 1995. Knowing that a land reform effort of this magnitude entails legal, administrative, and economic hardships and complications, the resolution of which will take years, MAF contracted the Land Tenure Center (LTC) to prepare: (a) an assessment of the strengths and shortcomings of its land reform work to date, and (b) a consolidation plan to help guide its efforts in coming years. Funding for LTC's involvement was provided by the World Bank, and LTC researchers were resident in the KR from 6 February through 2 August 1995.

This report presents LTC's findings and recommendations on the land tenure transition and constitutes the assessment portion of LTC's mandated output. The information contained in this report has been used to prepare a second document, *Land and Agrarian Reform in the Kyrgyz Republic: Consolidation Plan*, that proposes a set of actions to ensure that the reforms are completed and produce a viable, market-oriented, agricultural sector.

Chapter 1 offers baseline geographic information on the KR, an account of the macroeconomic environment in which reforms are taking place, a brief project history, and a description of the research methods. Chapter 2 chronicles the legal and regulatory changes that have driven land and agrarian reform in the KR since 1991 and evaluates this legislation for its legal consistency, underlying economic assumptions, and broad policy implications. Chapter 3 employs national land statistics to describe changes in the agrarian structure that have resulted from the legal and regulatory evolution during 1991–1995, including the number and size of farms, land use, and related indicators of land tenure change and agrarian reform. Chapter 4 reviews the structure, function, and efficacy of administrative bodies that set and enforce land and land reform policy, recommends administrative adjustments, and identifies land administration tasks the state can eliminate—and others it will need to bolster—as the KR completes its transition from command structures to market principles in agriculture. Finally, Chapter 5 uses data obtained in structured surveys and case studies conducted by LTC on a 10 percent sample of former state and collective farms to describe at the farm level the successes and shortcomings of reform measures to date; the chapter also makes recommendations for new or altered land reform policies and procedures.

Chapter 1

OVERVIEW

by

Peter Bloch and James Delehanty

I. GEOGRAPHIC BACKGROUND: AGRICULTURAL RESOURCE BASE

The distribution of agricultural activities in the Kyrgyz Republic (KR) can be found in figure 1.1. This map serves as an introduction to agricultural production in the country.¹

Note, first, the extent of pastures. Of the republic's total surface area of 20 million hectares, 9 million hectares (45 percent) is pasture. Fully 85 percent of **agricultural** land is pasture. The KR is high and mountainous, with crop production possible only in limited valley areas. For this reason, most land under 1,500 meters above sea level (MASL) is cultivated. Low-lying areas not under the plow are almost entirely **winter pasture** (shaded medium-gray in figure 1.1). Winter pasture is grazed from November through March where snow cover permits. Cut fodder augments winter pasture as necessary.

Summer pasture (shaded with a touch of gray) is more extensive. It comprises the country's vast high grasslands between 2,000 and 3,000 MASL and constitutes approximately one-third of the country. Snow-covered during much of the year, the summer pasture zone is used by herders during June, July, and August. Intermediate zones (between 1,500 and 2,000 MASL) are identified in figure 1.1 as **spring-fall pasture**, used in April and May, and again in September and October.

In 1990, just before the beginning of reform, livestock and livestock products accounted for 60 percent of the gross value of agricultural goods. Livestock numbers were as follows: 10 million sheep and goats, 1.2 million cattle, and 300,000 horses. Nearly all livestock were under the control of large-scale state agricultural enterprises and collective farms. Livestock numbers have declined somewhat since 1990, as has the contribution of the livestock sector to total agricultural output (see chapters 3 and 5).

Cultivated land constitutes just 1.5 million hectares of the nation's total land area of 20 million hectares. About half of the cropland is planted to grain. Figure 1.1 shows grain

¹ *Glavnoye upravlenie geodezii i kartografii*, Atlas Sel'skogo Khoziajstva SSSR, *Ministerstva Geologii i Okhrany Nedr SSSR*, Moskva, 1960, p. 265. Translations of the map legend and captions are literal but accurate. Elsewhere in this document Chuya is transliterated as Chui.

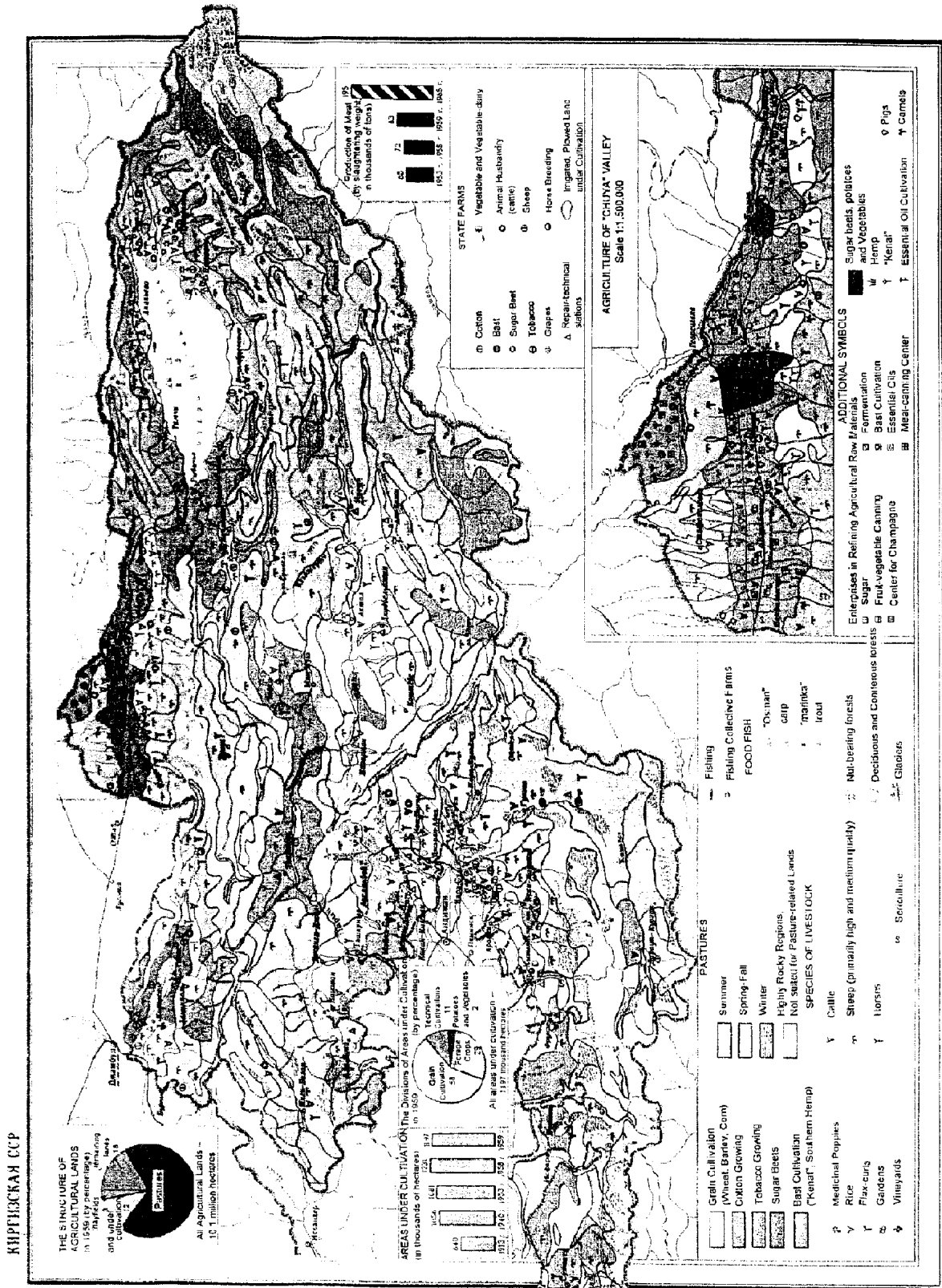


Figure 1.1
Geographical Distribution of Agricultural Activities

production is concentrated in the north, mainly in the Chui Valley² and also on the eastern shores of Lake Issyk-Kul. Principal grains are winter wheat, spring barley, maize, winter barley, and spring wheat. Average grain yields are equal to those of Ukraine due to the relatively mild winters that permit fall planting and the predominance of irrigated production.³

Nongrain crops that contribute substantially to the national economy include hay and—especially in lowland areas of the southwest, where the weather is mildest—tobacco, cotton, fruits, and vegetables. The most notable contrast in the agricultural geography of the country is the predominance in the southwest (in the valley of the Fergana River and its tributaries) of relatively small-scale production of horticultural and industrial crops, such as tobacco and fruits, versus an emphasis on large-scale grain production in the north, especially in the Chui Valley.

More than two-thirds of all cropland in the KR is irrigated. Irrigation water originates almost entirely on the partly glaciated high slopes of the Tien Shan and lesser mountain ranges.⁴ Upkeep and management of the irrigation network under the new system of decentralized, smallholder production, without heavy state subsidies, is a major unresolved issue that will ultimately help determine the success or failure of land and agrarian reform.

Under current land reform legislation, the state retains control of pasture and other nonarable land, while cropland and most of the nonland assets of the former state and collective farms are being distributed to rural residents. This means that less than 10 percent of the national territory is subject to privatization. As will be shown, managing access to nondistributed land will be a critical issue as reforms proceed.

Frequent reference will be made in the following chapters to regional differences in production and reform. Mainly these differences will be expressed by *oblast*. Figure 1.2 shows the location of the republic's six *oblasts*.

II. MACROECONOMIC CONTEXT FOR LAND AND AGRARIAN REFORM

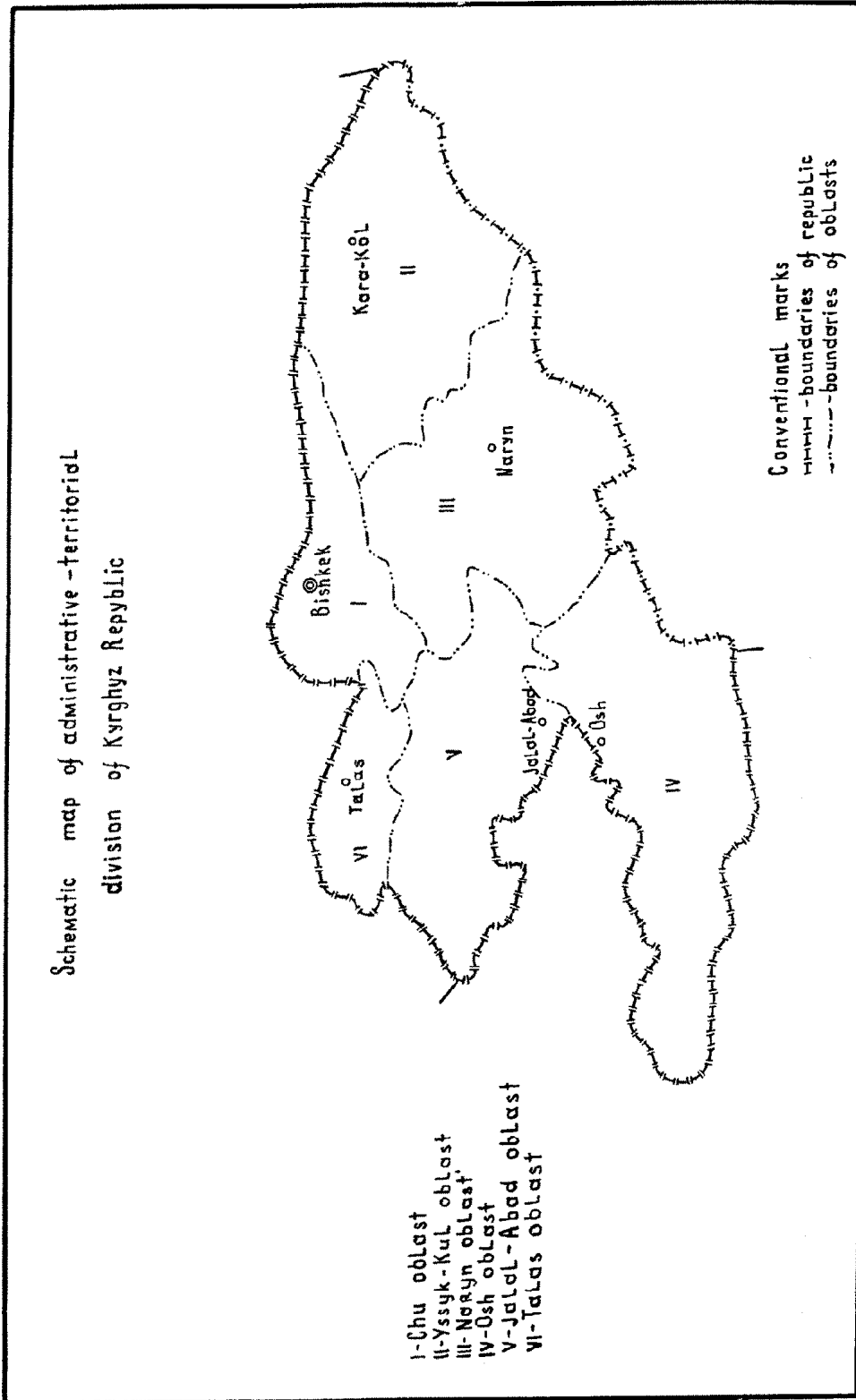
The economy of the KR has suffered since the breakup of the Soviet Union. Per capita gross domestic product (GDP), estimated at US\$680 in 1993, is one of the lowest in the Commonwealth of Independent States (CIS). Due to the relative success of its market reforms, however, the KR was one of the few CIS members to experience the beginnings of economic recovery in 1995. One of the most important elements of market reform was the control of

² Figure 1.1 also shows that sugar beets were prominent in the Chui Valley during the 1960s. By the 1980s, however, poor agronomic practices and sugar beet diseases had caused the crop to give way almost completely to wheat and barley. See World Bank, *Agricultural Sector Review for the Kyrgyz Republic* (1994, p. 5).

³ World Bank, *Agricultural Sector Review for the Kyrgyz Republic* (1994, p. 5).

⁴ Nearly all the irrigation water used by neighboring republics, notably Kazakhstan and Uzbekistan, also flows from the interior of the KR.

Figure 1.2



inflation and consequent currency stabilization. The annual rate of inflation peaked at over 1,000 percent in 1993, falling to 450 percent in 1994; by early 1995, the monthly rate had dipped to 1.6 percent and the 12-month rate was below 50 percent. The national currency, the *som*, was introduced in 1993. Within months, monetary policy had achieved a remarkable degree of stability. The *som* stabilized against the dollar and other western currencies in 1995, having appreciated in real terms in 1994. While real GDP continued to fall in 1994 and early 1995, the macroeconomic situation has finally become supportive of progress toward economic growth and transformation.

Macroeconomic stability is a necessary, but far from sufficient, condition for improvements in the performance of the agricultural sector. Other external factors such as the breakup of the Soviet Union and the recently unreliable rainfall pattern have combined with internal policy confusion to constrain the transition of agriculture to operation under private market conditions.

Primary agriculture employs about one-third of the labor force and contributes a similar share of GDP; an additional 10 percent of the labor force is involved in agroprocessing industries. In the Soviet period, the KR supplied a wide range of high-quality agricultural products, including wool and meat, cotton and silk, and fruits and vegetables; agricultural and agroprocessed goods constituted half of the republic's exports. Since 1990, output and exports have declined as the complex trading system of the Soviet Union broke down. A fall in the terms of trade for primary products, the loss of CIS markets, the reduction of transfer payments from Moscow, and the instability of monetary policy all contributed to a shift in production toward self-sufficiency.

In early 1994, as part of its overall market reform program, the government began to liberalize the agricultural pricing and marketing system. State orders for procurement were virtually eliminated, and prices were partially freed. Simultaneously, however, the availability of credit to agriculture diminished partly due to huge interenterprise debt arrears that reduced the liquidity of the financial system; interest rates skyrocketed, so farmers used fewer purchased inputs. Thus there was no apparent supply response to the liberalization measures. In 1995, the rate of interest had declined to more affordable levels (about 30 percent per year) and institutional credit was made available in nearly sufficient quantities, but a severe drought masked any evidence of improvements in productivity.

III. PROJECT AND RESEARCH METHODS

LTC research began in Bishkek in early February 1995 with planning meetings with officials in the Ministry of Agriculture and Food (MAF) and other branches of government. Fieldwork commenced on 10 February with a series of assessment visits and structured interviews with *oblast* and *rayon* administrators, land reform officials, farm managers, farmers, farmworkers, and others in three diverse regions: the Chui, Issyk-Kul, and Osh *oblasts*. These assessment visits and interviews gave the LTC research team the background necessary to design more

formal research procedures and protocols in three discrete areas: (1) the legal and administrative process of land and agrarian reform; (2) the assessment and use of official statistics documenting changes in agrarian structure during the reform period; and (3) the sampling and questionnaire design for on-farm interviews with rural committee heads responsible for implementing reforms at the farm level and heads of newly restructured farms. The specifics of the work program are detailed below.

A. ASSESSMENT OF LEGAL AND REGULATORY FRAMEWORK

Building on the detailed assessments by the Rural Development Institute and EU-TACIS consultants, LTC conducted a careful inventory and study of all the legislation and regulations that have been issued since the reforms began. During March and April 1995, legal documents and the details of land administration were obtained from officials in the MAF, the Ministry of Justice, and other relevant agencies. The main difficulties concerned translation of the legal texts into English and interpretation of occasionally obtuse and frequently contradictory laws, decrees, and regulations. LTC determined that a narrow legal approach to assessment was inadequate and added a socioeconomic point of view to its reading of the documents. LTC's analysis and recommendations concerning legislative issues are found in chapter 2.

B. RESEARCH ON EVOLUTION OF AGRARIAN STRUCTURE

LTC worked closely with the State Institute for Land Resources and Land Management (*Kyrgyzgiprozem*, also known as *Kyrgyzmamzherresurstary*), the Republican Center for Land and Agrarian Reform (CLAR), and the State Committee on Statistics (*Goskomstat*, now known as the National Statistical Committee) to develop a consistent set of data to document the progress of farm restructuring. In a country where state agencies take statistical thoroughness much to heart, and where farm restructuring is the post-Soviet reform that affects the largest number of people, it is surprising that official documentation of farm reorganization is not adequate to allow easy assessment of the pace of change, nationally or regionally. Ambiguities and shifts in the definition of land reform concepts (such as **peasant farm**, **private farm**, **cooperative farm**, and **reorganized enterprise**) account for much of the inherent confusion in official land reform statistics. As described in chapter 3, the only methodological solution to this problem was to adopt a chronological approach to the description of agrarian structure.

C. RESEARCH ON CURRENT STATUS OF REFORMS

In order to ascertain whether the current land administration system is appropriate for the new requirements of the market economy, LTC assessed the roles and functions of the large number of government agencies that are, in one way or another, responsible for the administration of land and buildings. The analysis and recommendations concerning the institutional aspects of land management are found in chapter 4.

D. ASSESSMENT OF INSTITUTIONAL STRUCTURE OF LAND ADMINISTRATION

LTC researchers studied the opinions and perspectives of the principal actors in the reform process via a variety of field research techniques, including formal sample surveys and semi-structured interviews. Based on a 10 percent random sample of the former state and collective farms, LTC researchers administered questionnaires during April and May 1995 to 47 heads of rural committees and 117 heads of new farm enterprises and interviewed 14 individual farmers. They also interviewed 11 *rayon akims* and discussed the status of the reforms with *oblast* and national officials. The presentation of the data and the policy recommendations that they generated are found in chapter 5.

E. PLAN FOR NATIONAL LAND FUND (NLF)

In response to a request by the Republican CLAR, LTC drafted a proposal, plus draft legislation and draft procedural forms, for the dissolution of the NLF and its distribution to the population through a bidding process. The proposal and accompanying draft legislation outlined a process intended, first and foremost, to be equitable but which also gave bidding advantages to land-poor families intending to farm. As of now (September 1995), the KR has announced no decision on the ultimate disposition of the NLF.

F. PLAN FOR ESTABLISHMENT OF REGISTRATION SYSTEM FOR IMMOVABLE PROPERTY

Based on experience in other countries and the realities of a market economy, LTC developed a proposal for the Government of the KR to create a single system of immovable property registration and thereby reinforce the security of rights of use, ownership, and other interests in immovable property. This proposal was presented to the Office of the President in July 1995. In the same month, the president delivered an order to the prime minister to establish a working group to design the system and to draft the legislation necessary to its creation. As of late July 1995, that working group was in the course of creation.

The results of the LTC/Republican CLAR work program were presented at a workshop on 4–5 July 1995. On 6 July, three working groups met to sketch out a program for consolidating the reforms based on the workshop presentations and the broad experiences of the participants. The ideas generated at the workshop were invaluable in refining the ideas and recommendations contained in this report and in preparing the consolidation plan.

Chapter 2

LEGAL UNDERPINNINGS OF LAND REFORM AND FARM RESTRUCTURING IN THE KYRGYZ REPUBLIC: ASSESSMENT AND RECOMMENDATIONS

by

Michael Roth and Larry Church

I. INTRODUCTION

This chapter gives an overview of the various laws, decrees, and regulations that have provided the legal foundation for farm restructuring in the Kyrgyz Republic (KR) from 1991 to 1995. These sources govern the privatization of property and land and, in some cases, introduce new institutions (for example, rural committees) to implement the reforms. Knowledge of these legal underpinnings is essential to understanding the types of farm enterprises that have emerged and the constraints that are acting to shape future restructuring.

Legal mandates on land reform and farm restructuring have changed several times since 1991. At least two initiatives have attempted to advance the reforms, each characterized by a new and dynamic set of decrees and rules. Moreover, compliance with the various mandates has not been uniform. Some former collective and state farms made changes on paper only. Others did nothing in response to early decrees yet instigated real change on their farms under the most recent reforms. This chapter describes the legislation underpinning the farm restructuring program in the KR; then it assesses the economic soundness and legal consistency of that legislation.

II. FARM RESTRUCTURING IN THE KR, 1991 THROUGH 1993

Three reasonably comprehensive laws created the legal framework for implementing the first farm restructurings: the Law on Peasant Farm of the Kyrgyz Republic of 2 February 1991, the Law of Kyrgyz Republic on Enterprises of 6 February 1991, and the Law of the Republic of Kyrgyzstan on the Land Reform of 19 April 1991.¹ (See annex 2.1 for a chronological listing of selected legislation from the inception of the reforms to the present.)

¹ The authors had at their disposal English translations of the law on peasant farms and the law on land reform. The decision was made to not translate the law on enterprises because of its dated content and length.

A. FARM RESTRUCTURING²

The Law on Land Reform envisaged two stages of restructuring (ARTICLE 25; see also ART. 2 of the President's Decree of 10 December 1992 on Measures for Continuing Implementation of the Land and Agrarian Reform). In the first stage (1991–1993), appropriate legislation and land regulations would be worked out; a special Land Fund under the Local Council of People's Deputies³ would be created for emerging private farmers, lessors, and farm cooperatives; land tax and rent (lease) payment schedules would be developed; boundaries of villages, cities, and districts would be demarcated; and collectives or state farms which were deemed to be unprofitable or of low profitability would be reorganized. In subsequent stages, land payment schedules would be corrected, a data bank on the land cadastre would be created and monitored, land passports⁴ for farmers and land users would be issued, leases would be either issued or introduced, and compliance with land legislation and land management systems would be maintained and monitored. Land reform implementation was made the responsibility of the Committee on the Land Reform and Land Management of the Council of People's Deputies, with participation of appropriate ministries and entities.

A special land fund was to be established from inefficiently used lands identified by inventory programs; land provided to agricultural industries but not utilized within one year; land allocated to nonagricultural industries but not utilized within two years; land of agricultural enterprises whose five-year performance was lower than norms established by cadastral assessment; and agricultural lands taken out of circulation, transferred to less valuable categories (other uses), or whose tenure had been terminated in compliance with the Land Code (ART. 5).⁵ Once land entered the fund, the Council of People's Deputies was to determine appropriate future actions, whether to continue use by existing owners, withhold lands, redistribute land to new landowners and tenants, or introduce conservation programs on degraded lands.

Inefficient collective farms, state farms, and other agricultural enterprises would be reorganized into agricultural cooperatives, associations of peasant farms, and peasant farms, in accordance with priorities established by the Cabinet of Ministers.⁶ (This differs from later rules that stipulate the restructuring of all such farms.) A land plot provided to a citizen(s) of a

² Unless otherwise noted, information in this section pertains to the Land Reform Law of 19 April 1991.

³ Also known as Local Soviet of People's Deputies.

⁴ These appear to have had in mind the land certificates discussed under subsection III, below.

⁵ The 11 October 1991 Decree on Emergency Measures on Ensuring Realization of KR Laws Regulating Land and other Relations in Agriculture instructs *oblast*, *rayon*, municipal, and village Councils of People's Deputies to set up, by 1 February 1992, a land fund containing not less than 1.5 million hectares of agricultural land. That land (no less than 50 percent irrigated) was to be given to village and town inhabitants before the beginning of the 1992 spring field works.

⁶ District Councils were given until 1 February 1992 to withdraw land from unprofitable farms or farms of low profitability (10 November 1991 Decree).

peasant farm, personal subsidiary plot, house dacha, building site, and horticultural or livestock breeding enterprise would be re-registered within the period 1991—1995 and the citizen(s) provided with an ownership document. Such a document was to be issued by village, settlement, town/city, or district Councils of People’s Deputies in accordance with plot location. All land rights associated with the plot prior to land registration would be preserved for a period of five years from the beginning of the reform; thereafter, all prior rights would be extinguished in favor of the current holder (ART. 8, 1991 Law on Land Reform).

The Land Management Service of the Committee for Land Reform and Land Management was made responsible (ART. 15) for annually providing land cadastre documentation, systematic land monitoring, inspections, and issuance of “passports” to landowners and tenants. Landowners and lessors were to be taxed annually according to tax rates established by the Committee for Land Reform and Land Management for plot quality and location (ART. 16). All development of scientific research, project research on land management, land cadastre, and land monitoring necessary to implement the reforms was to be carried out with funds from the KR budget, under the oversight of the Committee for Land Reform in agreement with scientific divisions of the Kyrgyz department of VASKHNIL (All-Union Academic Agricultural Scientific Research Institute), Kyrgyz Academy of Sciences, and other scientific subdivisions (ART. 17). The Land Management service of the Committee for Land Reform and Land Management was put in charge of land use, land monitoring, land cadastre, land management organization, topographical and geodesic mapping, and soils, botany, agrochemical, and other land management research with financing from the KR budget (ART. 18). Any land improvements, however, were to be carried out at the initiative of landowners and tenants at their own expense (ART. 18).

B. PEASANT FARMING ENTERPRISES (PFE)

Under the Law on Peasant Farms, a peasant farm was defined as an independent farming complex comprised of family members, relatives, and other individuals jointly operating the farming unit (ART. 2). Establishment of such a farm was voluntary (ART. 6). Ownership was restricted to one farm per family (married couple and underaged children), and the farm could be inherited by persons designated by will (ART. 7). All transfers other than inheritance—buying and selling, granting, mortgaging, unauthorized exchange or allotment—were strictly prohibited (ART. 7). All members of the PFE were given rights of due compensation upon exiting the enterprise, the amount to be determined according to labor and property share assigned to the PFE during its organization (ART. 8). Terms of compensation had to be established according to mutual agreement with all farm members, but the term for payment could not exceed five years (ART. 8).⁷ A land tax or rent could be levied on the PFE, depending on land quality and location, at rates determined by law (ART. 17). Rights of

⁷ It is difficult to know what the architects of this policy had in mind: whether to ensure that the land share was sold only to family members or to give other members right of first refusal to prevent unwanted outsiders from acquiring land from the enterprise. In either case, rights of the individual landholder are greatly circumscribed.

ownership were to be forfeited in cases of voluntary withdrawal, failure to make necessary land improvements within the designated period, and failure to pay land taxes and other charges on time (ART. 20).

Under the law, any citizen of legal age (>18 years) could become the head of a PFE; and in the event of sickness or retirement, the head was entitled to transfer landownership, rent-out the farm, or assign all rights and duties to another PFE member. Land of former collectives (and of state farms established on collective farms) was to be apportioned by shares according to the labor contributions of the farmers during their work tenure with the collective farm. On other state farms, land grants were to be assigned on a rental basis with rights of future purchase taking into account the farmers' personal income pursuant to the Law on Enterprises of the KR (ART. 6). Maximum farm size allocated to a PFE was to be determined by the *rayon* Councils of People's Deputies according to soil fertility, public land reserve, population, number of members, professional training and capacity—all aimed at ensuring optimal crop and livestock efficiency (ART. 13).

The head of the PFE is the legal person responsible for representing all farm interests in dealings with the state as well as all matters of registration, negotiating contracts, dealing with property and other legal activities as may apply (ART. 3), and organizing production and marketing (ART. 4; this article also forbids interference by the state except in cases of law infringement). The right to ownership of all land and property (houses, buildings, livestock, machinery, vehicles) and to farm profits (after taxes and other payments) is guaranteed under ART. 7. Establishment of a PFE is contingent on a lease contract concluded with the local Council of People's Deputies (ART. 10). Terms are established in the lease contract; land cannot be granted to the PFE for less than five years, but other conditions may apply. Specifically, ART. 14 stipulates that the PFE must use the land for the intended purpose, must achieve at least minimum productivity (in accordance with cadastral evaluation), must use resource-conserving technologies, must keep the land free of chemical and radioactive pollution, and must avoid any worsening of the ecology.

Land allotments are carried out on the basis of applications presented by the village. A PFE is considered formed as soon as the *rayon* of Council of People's Deputies so decides (or the Cabinet of Ministers in the case of foreign citizens). While theoretically any citizen is eligible, land is assigned on a competitive basis—unlike later reforms where all legal citizens are made eligible. Preference is to be determined by length of farm experience, necessary qualifications, and capability to manage the PFE. Those collective and state farms showing higher land-use efficiency than the *rayon* average are exempt from the restructuring, for only land of farms in the worst financial condition was to be withdrawn for PFEs. Land used for scientific research and educational purposes was also excluded (ART. 11).

With consent of the PFE, people are entitled to move through the territory by vehicle; to boat, bathe, and fish in its water reservoirs; and to place tents, make a fire, and camp, on condition that nature is preserved in a pure ecological state (ART. 14). The right to use forests, water reservoirs, and common minerals on or under PFE land belongs to the PFE (ART. 15).

Owners also have to comply with labor covenants (ART. 21). A labor contract for family and hired labor is required that lays out terms for length of the working day, days off, paid holidays, wage rate, meals, and any other condition that may apply. Wage rates and official vacation time could not be less than that for similarly qualified workers in state enterprises. Hired labor contracts have to be registered with the corresponding Council of People's Deputies and the appropriate trade union. Working members over 14 years of age are entitled to insurance and social security equal to that of workers and laborers (unclear whether in the PFE or in comparable nonfarm enterprises), payable by the PFE into the state fund of social insurance (ART. 22).

The PFE remained eligible to acquire farm machinery, spare parts, feed, fertilizers, farm chemicals, building timbers, and fuel and lubricants through the state logistical support system at the prices established for collective farms, livestock from agricultural enterprises at prices fixed by bilateral agreement, and pedigree seeds and plants from agricultural organizations at retail or wholesale prices as may apply. Gas and electricity for production needs continued to be provided at the same tariffs as established for collective farms. Also, PFEs continued to have access to state agroservice enterprises for farm machinery maintenance at wholesale prices established for state and collective farms (ART. 24).⁸

C. MEASURES TO COMBAT AGRARIAN DECLINE

Any restructuring that started as a result of the 1991 reforms had come to a halt by the spring planting season (April) of 1992. The 10 December 1992 Presidential Decree, "On Measures for Further Implementation of Land and Agrarian Reforms in the KR," attempted to bring a sense of urgency to the restructuring effort. A deepening crisis in food procurement had pinned the fate of all political, economic, and social reform in the KR on a timely and successful restructuring effort.

The presidential decree called for resumption of reform efforts, the allocation of land in the National Land Fund (NLF) on a competitive basis to citizens for commodity farming, and the appointment of competition committees to ensure implementation (ART. 1 and 2). These were intended to alleviate the pending food crisis and to increase farm efficiency. The decree advised that no limit be placed on the size of land parcels allocated to individuals exiting state or collective farms (for purposes of setting up a private farm) but recommended that enterprises provide every permanent member of a collective or state farm with a land share (ART. 3). Pensioners, invalids, and workers in the social sphere (health and social workers, teachers) living on the territory were also to be given rights to a share of land and property (ART. 4). Rural committees (formed by the 13 January 1992 Presidential Decree) were given the right to levy taxes (ART. 6). Consideration was given to reorganizing agroprocessing and procurement enterprises into joint-stock companies (ART. 9). Producers were given rights to

⁸ Unlike the more recent restructurings in which enterprises (farms) are being established under dire economic conditions (collapsing input and marketing services), farms created in the initial period had considerable support in the form of assured contracts and markets.

negotiate freely for the sale of produce (ART. 10), though state orders for grain, cotton, tobacco, and wool for the 1993 season were left intact. Clinics, schools, and other public infrastructure were to be passed as common property to members of operating collectives or to local government, taking into account the opinions of village administrations and rural committees (ART. 11). The Ministry of Agriculture and Food (MAF) was instructed to work out methods for valuing the property of collective and state farms (ART. 12), while the MAF and the state agency for inspection on land survey were charged with recommending farm reorganizations and crop rotations (ART. 13). The Government of the KR was given a month to confirm the program of land reforms (ART. 15), while heads of *oblast* and *rayon* administrations⁹ were charged with ensuring their implementation (ART. 16).

The restructuring effort continued to stagnate through the spring of 1994. A government decree of 24 January 1994 highlighted the severity of the agricultural crisis, citing an 8 percent decline in gross farm output between 1992 and 1993, an 8 percent decline in cattle numbers, a 12 percent decline in sheep and goats, and a 32 percent decline in pigs. Measures proposed to stimulate agricultural production included calls for greater state control over agricultural production and marketing, including fixed minimum procurement volumes and prices. Government procurement agencies (MAF, the KR production association, and Tamak-ash) were directed to conclude agreements with producers in all tenure categories within two months. To assist procurement efforts, *oblast* and *rayon* administrators were instructed to determine the optimal use of arable lands and the optimal number of livestock. The National Bank and joint-stock commercial banks were instructed to settle within one month the issue of supplying procurement and processing enterprises with credit sufficient to advance producers 25 percent of the cost of the minimum volume of purchases. The state committee for the economy, MAF, the republican production association, and Tamak-ash were instructed to introduce prices that took into account cost/price, objective conditions, and demand and supply of the state in the market.¹⁰

III. FARM RESTRUCTURING, 1994 TO PRESENT

The 1994 restructuring effort was both a continuation of early restructuring reforms and a frontal assault on the majority of state farms or collectives which had ignored previous restructuring edicts. Although the decrees and regulations authorizing this stage of the farm restructuring were issued early in 1994, the preoccupation of farm enterprises with the 1994 cropping season (beginning in April) effectively delayed any earnest implementation until the fall months.

⁹ Referred to as “local government administrations” in the English translations.

¹⁰ Producers are given full discretion to negotiate prices for commodities not included in minimum state procurements, both within and outside the republic.

A. VISION FOR LAND AND AGRARIAN REFORM

The 22 February 1994 Presidential Decree (Measures on Promoting Land and Agrarian Reforms in Kyrgyz Republic) underscores government priorities to create effective market conditions, improve farm profitability, instill market principles, and provide equal conditions for the development of all types of farm enterprises. The right to a share of arable land, with the exception of land reserved for the NLF and pastures, is reaffirmed for all people living and working on the territories of collective and state farms (ART. 1). Any citizen or juridical person of the KR has the right to sell, exchange, bequeath, mortgage, and/or lease the use-right (ART. 2).¹¹ Such persons also have the right to organize joint-farming enterprises by pooling land shares (ART. 5) and are granted 49 years of tenure with preferential rights of extension upon termination (ART. 3). The decree reduced the NLF to 25 percent of all agricultural land, except pastures (ART. 4). The government may buy land for the fund for redistribution from citizens and juridical persons at the market price (ART. 8). Plots must be used only for agricultural production (ART. 10). Maximum landholdings for one family may not exceed 20 hectares in zones of intensive agriculture, 25 hectares in semi-intensive zones,¹² and 30 hectares in mountainous pasturelands (ART. 11).¹³ Citizens who obtained land before this decree are entitled to keep holdings only within these limits; any excess land is to be returned for distribution, with cash contribution paid according to levels set by government (ART. 12). Pastureland cannot be redistributed but can be leased, with preference given to shepherds and employees of livestock enterprises (ART. 13).

Under the presidential decree, state authorities are prohibited from interfering with individual use rights; any infraction is subject to indemnification of farmers' losses out of the *rayon* budget (ART. 14). MAF is given power to promulgate rules regulating agrarian reform and the privatization of agricultural enterprises, to coordinate and implement activities of *rayon* administrations and rural committees on problems of land and agrarian reform, and to control tax receipts and their use (ART. 17 and 19). Heads of *rayon* administrations are charged with developing regional programs for farm reorganization, implementing the reforms of all agricultural enterprises, and setting up rural committees and providing them with advice and leadership (ART. 18). Consideration is to be given to increasing tax rates twentyfold, with 50 percent of collections going to the local budget and rural committees for social infrastructure in the territory and the remainder directed to the republican budget for state support of the reforms. However, this provision was repealed by decree on 27 February 1995; only 25 percent of the tax collected now goes to local governments, and 75 percent goes to the republic's budget.

In order to minimize delays in implementation, regulations were to be issued (within two weeks) on: distribution of land-use rights; the role of rural committees; the order of land

¹¹ In 1994, the right of sale and exchange was restricted to members of the enterprise; beginning in January 1995, this right was to be made possible to other citizens and juridical persons of the KR

¹² Referred to as zones of average land-use intensity in the English translations.

¹³ However, ART. 20 stipulates that the MAF in agreement with local state administrations must establish minimum sizes of plots of land for managing commodity farming.

allocation from the NLF; the reorganization of agricultural enterprises; the reorganization of pedigree, seed, and experimental farms; and proposed changes and additions to legal acts proceeding from the presidential decree (ART. 22). Government Regulation No. 743 of 25 March 1994 called for prompt and immediate action on several fronts. In particular, development and adoption of acts regulating the process of land and agrarian reform were to be submitted by 1 October 1994. The MAF, together with each *rayon* administration, was instructed to physically identify land for the fund and report within two months the rules for land redistribution. Heads of *rayon* administrations were instructed to develop regional programs for implementation before 1 July 1994 and to submit within a month proposals on minimum size of land plots, taking into account natural and climatic conditions. Furthermore within one month, the MAF, together with *oblast* administrations, was required to submit proposals on orders to ascertain the land shares of citizens, grant certificates on rights of land use, reorganize agricultural enterprises, and implement the NLF.

B. RURAL COMMITTEES AND LAND REFORM COMMISSION

Regulation No. 148 of 25 March 1994 attempts to clarify the roles of the MAF, local authorities, and rural committees in the land reform program. Several deadlines have been issued for completion of various steps in the process. The MAF was ordered to have a national program in place by 1 June 1995. Local administrations were given until July 1995 to provide rules on the organization and function of rural committees. Rural committees are to be established on all collective and state farms as well as other agricultural enterprises but are considered executive instruments of the *rayon* administrations. Their responsibilities are substantial: secure and protect the constitutional rights of citizens; lend assistance in establishing enterprises; monitor and enforce rational land use and environmental protection; regulate land and water use; prepare land records; consider grievances and applications before going to court; solve conflicts over economic matters; reallocate land in cases of land use infractions; issue land and property shares; keep statistics on all economic activities according to official procedures; and oversee the registration of newly organized enterprises.¹⁴ Such committees, depending on population and land-use intensity, would normally comprise between three and seven members confirmed by the head of the *rayon* administration. The chair is appointed by the *rayon* administration for a three-year period;¹⁵ the deputy chair is also appointed by the *rayon* administration but on the basis of the chair's recommendation. Operations are to be financed by the local community budget and also from the proceeds of economic activities.¹⁶

¹⁴ These responsibilities would appear to effectively ensure that the management of the former collective or state farm (for example, directors, farm economists, agronomists) be appointed or elected to the rural committee, despite risks that bad management or centralized planning will be perpetuated.

¹⁵ The chair of a collective or director of state farm is allowed to hold both positions simultaneously.

¹⁶ Incentives would seem to exist here to maintain the status quo (paying committees from the proceeds of a collective-styled enterprise). Divestiture into peasant enterprises would dictate the need for a tax system or market controls to capture revenue for local community budgets, both substantial measures requiring long time horizons to effectively enforce. It can also be interpreted as a justification by rural committee heads for using

As a result of difficulties experienced in implementing reforms, Regulation No. 3 of 23 January 1995, on the Rule of Commission for Implementation of Land Reform and Reorganization of Agricultural Enterprises, created a new organ, the commission on land and agrarian reform, to help realize reforms in the agrarian sector. Each commission, one for each farm, is to include the head of the rural committee (the head of the commission), MAF representatives, village *kenesh* (deputy heads), *oblast* and *rayon* representatives of centers of agrarian and land reform, representatives of banking and statistical institutions, and representatives of farms elected at a general meeting, the size not exceeding 15 persons. Responsibilities of the commission are to analyze financial and economic activities, conduct land inventories, value property, develop the reorganization plan, and generally implement the reforms. These duties sound remarkably similar to those assigned to the rural committee, though the new organization is presumably aimed at pulling together the decision-making and planning of local interests under one umbrella group. From January 1995 onward, any division of land and property shares is contingent on a reorganization plan prepared by the commission (as opposed to *rayon* administrations) and adopted by the *rayon* administration and MAF.

C. NLF

Regulation No. 345 of 19 May 1994, Rules on NLF, identifies and reserves land for the purposes of developing national entrepreneurship in agriculture¹⁷ and organizing priority enterprises. The fund legally should comprise 25 percent of all agricultural land in each *rayon* of the KR and place it under MAF control. Sizes, boundaries, composition, ecology, and economic value of fund land are to be identified in working documents prepared by rural committees, *rayon* centers for land and agrarian reform, and Kyrgyzgiprozem.¹⁸ *Rayon* offices for land and agrarian reform are responsible for the land inventory. Such land, once in the fund, is to be used for establishing state joint-stock stud farms, seed-producing farms, and experimental enterprises on a lease basis, and for citizens migrating to become permanent residents of a community.¹⁹ Remaining NLF land not yet distributed is to be allocated to land users by the rural committee, on the basis of lease agreements, for farm production only. MAF Regulation No. 7, On NLF, of 8 February 1995, further clarifies that fund land may not be subdivided without proposals of the *rayon* administration and approval of the MAF, but may be temporarily leased on a competitive basis for profitable economic activities that benefit enterprise members, help increase crop and livestock productivity, or expand employment opportunities. Permission is further granted to give NLF land to inhabitants of the former farms and employees of cultural, teaching, health, trade, and civil services. The remainder of the land

the equipment of the former state and collective farms to cultivate NLF land to maintain profitability levels of the former enterprise.

¹⁷ Some have interpreted this to mean reserving land for the indigenous Kyrgyz population, though this provision appears to allow the allocation of land to a broader definition of "citizen."

¹⁸ *Kyrgyzmamzherresurstary* in Kyrgyz.

¹⁹ Another undated translation, the source of which could not be verified, stipulates that fund land is to be given to migrant citizens from inside the republic and abroad, the jobless, citizens working and living outside the farm, and persons seeking residence in the area for purposes of establishing a commodity farm.

is to be given on a temporary competitive basis to peasant farms, with permission of the rural committees.²⁰

D. FARM REORGANIZATION

Provisions on the reorganization of agricultural enterprises are covered under Regulation No. 632 of 22 August 1994. The agrarian reform is made obligatory for all agricultural enterprises regardless of type (SEC. 1). Free choice of farming unit, within the bounds of legislation, and equal access of all growers to industrial and social services within the territory of the farm is guaranteed (SEC. 2). Land share certificates are to be issued by rural committees at a cost of 25 times the current land tax rate (possibly to be paid over time). The certificates are to be registered at the local register of deeds. They may be sold, exchanged, inherited, and pledged (ART. II and III). Collectives and state farms may be:

- ◆ divided into peasant farms with voluntary reconsolidation into associations and cooperative societies allowed, but the maximum farm size held by any one family cannot exceed the limits specified in table 2.1 (SEC. 3);
- ◆ reorganized in whole or part into a joint-stock company; or
- ◆ declared bankrupt, with the property sold by auction to other producers.

TABLE 2.1 Minimum and maximum holdings for peasant farm enterprises, 1994

	Minimum size (ha)	Maximum size (ha)
Zone of intensive farming	10	20
Zone of semi-intensive farming	15	25
Mountainous zones suitable for livestock rearing	20	30

Restructuring must be carried out in accordance with a regional program. Under SEC. 6, restructuring must at a minimum contain: (1) accurate measurements and legal boundaries of farms, their arable land use, national fund land, and settlements with personal plots (planned for livestock grazing, hay-making, collective gardening and orchards); (2) a valuation of industrial and social assets and their viability and analysis of industrial activity and financial-economic status; (3) the size of population according to category, number of farmsteads, and work force; (4) future land uses, possible forms of cooperation among new enterprises, planning for social infrastructure, and forms of industrial service, storage, and processing; and (5) the order of dividing land and property shares, definition of rights and responsibilities of the

²⁰ While previously fund land was to be preserved for state stock and pedigree farms, for research and teaching, and for migrants settling permanently in the area, these new regulations theoretically allow the community to assign all fund land to local inhabitants as long as MAF approval is obtained.

farming units being formed, details on the restructuring process, valuation of land and property shares of workers seeking to leave the farm, and rights of succession, among other responsibilities. Property valuation is to be carried out by the valuation board in accordance with the formula specified in Joint Decree No. 58 of the Government and State Property Fund of KR of 5 February 1993 (SEC. 9). The research plan is to be discussed at a general meeting of collective members and, after approval by the *rayon* head, implemented by the rural committee (SEC. 7 and 8). If a consensus research plan is achieved, certificates for land use rights, land plots in kind, and property shares are to be given to juridical owners (SEC. 16).²¹

E. DEBTS

Originally, debts incurred by agricultural enterprises before 1 October 1994 were to be paid out of the money and property of the reorganized farm (SEC. 10, The Provisions On Reorganization of Agricultural Farms). Any debt remaining was to be transferred to the newly formed enterprises (after consideration by the Ministry of Finance, the MAF, and the state committee for economy) and payable over 40 years at 0.75 percent interest annually with the first repayments beginning on 1 January 2004 (SEC. 10). However, these terms have been superseded by Regulation No. 42, On Debts of Reorganized State and Collective Farms, of 16 February 1995, which stipulates that the MAF is permitted to sell the property and livestock of reorganized state farms to newly formed enterprises with repayment in equal parts over 10 years. However, 50 percent of the debt of reorganized state farm, and 75 percent of the debt of reorganized collective farms must be passed on to newly created enterprises, with repayment in equal parts over a 15-year period beginning 1 January 1997.²²

F. PROPERTY SHARES

Individual property shares of citizens are to be prorated according to the labor contributions of all workers on a given farm (determined by multiplying the value of the entire property by the “labor contribution” of each worker) (SEC. 11). The property value is defined as the gross value less payment of farm debts in the case of state farms (perhaps all property in the case of former collectives, though this interpretation is not made explicit). Labor contribution is defined as the average annual salary of workers (cash and in-kind) for the most recent 10 years multiplied by length of service on a given farm.²³ Citizens and juridical persons with certificates

²¹ If farm members cannot agree on a reorganization plan, then (after property shares are defined and land use certificates issued) the local *rayon* administration and rural committee are entitled to grant land plots and property shares to people having pooled the necessary land-use certificates (SEC. 14). This can be done without the consent of farm members. No mention is given to the status of the remaining persons or to the land remaining in the enterprise.

²² The remainder of the debt is assumed by the state. These provisions create an incentive on the part of the state and collective farms to exaggerate the amount of their debts in order to increase the portion to be covered by the state.

²³ The average salary would increase with shorter tenure and whether an individual worked on the farm at the time of restructuring. Average salary would be smaller for retirees. Whether the labor contribution would be aided by tenure would depend on the level of price inflation and length of tenure with the farm.

of land-use rights, whose pooled shares comply with established farm-size limits, are deemed eligible for a “state act of land use right” without the consent of other members of the former enterprise. Such act is to be issued by the *rayon* administration and formally registers the newly formed enterprise (SEC. 12). Actual land allocation is to be carried out by the *rayon* land management office along with the rural committee, giving due consideration to rational land use, “compact” (unfragmented) land tenure, and the viability of existing irrigation systems (SEC. 12). The choice of farm enterprise is voluntary except in the cases of declared bankruptcies, which are carried out under the KR Law on Bankruptcy (SEC. 13).

Social-cultural units, stores, workshops, garages, oil stations, and other forms of common property (irrigation canals, drainage systems, pumping stations, wells, reservoirs, and sprinkler systems) should be managed by the rural committee for those citizens with shares. Remaining assets (buildings, livestock, fruit trees, fodder) are to be sold or divided among farm members according to SEC. 9 and 11 (SEC. 17). Rural committees should promote the formation of joint-stock companies to undertake the supply of technical services, farm goods, electrification, mechanization of labor-intensive activities, improvement of meadows and pastures, and services providing chemical and biological protection (SEC. 18). Rural committees may form agroindustrial enterprises on a contractual basis to provide processing, construction, repairs, land reclamation, maintenance and operation of irrigation systems, veterinary services, marketing of agricultural produce, and any other services as may apply (SEC. 19). Agricultural enterprises of special significance to government should be reorganized by the MAF and local administrations into state joint-stock enterprises with land and property retained as needed to carry out their respective functions (SEC. 20). These would include seed farms, pedigree farms, livestock breeding stations, hippodromes, fruit nurseries, and educational and experimental farms; their operations are to be continued on, or established with, land reserved or allotted under the NLF on lease terms (SEC. 21). Divestiture of any such livestock breeding farms, poultry farms, incubators, or greenhouses should take place within three years by sale or by conversion into joint-stock companies (SEC. 22). Agrochemical, service, and veterinary enterprises are convertible into state joint-stock societies with majority control held by the MAF (SEC. 23).

G. CONSTITUTIONAL LAND RIGHTS

According to ART. 4 of the Constitution of the Kyrgyz Republic (5 May 1994), the land, its subsoil, water, air space, fauna, and flora are the property of the state (SEC. 2). Although plots of land may be given to citizens and their associations for private possession in accordance with the law, the purchase and sale of land is strictly prohibited (SEC. 3). Nevertheless, the republic “shall defend the right of its citizens and legal entities to own property” (SEC. 4).

H. LAND SHARES AND CERTIFICATES

The Provisions on the Order of Land Share Definitions to Citizens and Giving Out of Certificates for Land Tenure Rights (no. 632) of 22 August 1994 defines the process of

granting land shares, issuing certificates and rights of parties using that certificate as security for credit. All land within the boundaries of collective farms, state farms, and other agricultural enterprises—with exception of fund land, pastures, populated areas with private plots, forests, and other reserves—is to be distributed to eligible interests. People eligible to obtain shares include persons presently working and living on a given farm, those retired from or disabled by work on a given farm, people born on a given farm working elsewhere who decide to come back for permanent living, and people living on the farm but working in the spheres of health, education, consumer services, commerce, culture, zoology, and farm supply services (SEC. 1). Land shares are to be determined by the rural committee, with consideration for the number of family members at the time of reorganization, and confirmed by the *rayon* administration. Applications received after the reorganization will be handled as applications for fund land in accordance with established priorities. Shares are to be allocated only once and are to be free of charge (SEC. 2).

Rural committees are responsible for issuing a formal certificate to citizens for land tenure rights showing the names of family members, the size of each individual and family land share, and the initial cost of the land in *soms* (SEC. 4).²⁴ Section 4 also clearly stipulates that this rate is not the basis for government to use in selling land, suggesting instead that shares are set in value terms for land quality (reflected in the tax rates) to ensure a more equitable distribution of assets. The certificate must be registered in the land cadastre of the *rayon* land management office before being issued to owners to become valid (SEC. 5). Certificate owners (SEC. 6) are allowed to voluntarily pool their land shares into agricultural enterprises within the limits of minimum and maximum farm sizes (set according to differences in irrigated arable land) indicated in table 2.1.²⁵ People living in suburban areas and growing vegetables are exempt from the minimum farm sizes. For those people who, prior to this decree, received individual land shares that now exceed the average land-share sizes for a given farm, compensation must be paid to the rural committees equal to the initial cost of a land-use right.²⁶ Also, the total area of the farming enterprise must not exceed the maximum size limits in table 2.1; any excess must be returned to the rural committee for redistribution (SEC. 12).²⁷

With the consent of other family members, a holder can sell his or her certificate to other members of the same farm and to citizens and juridical persons of the KR (transactions to foreign citizens and juridical persons is prohibited under ART. 10) for purposes of agricultural production. Former members of the collective farm are thus given preference over other purchasers. When certified by the notary's office in agreement with the rural committee and *rayon* land management office, certificates may be legally bequeathed, sold, exchanged, and

²⁴ Defined as the land tax rate increased by 25 times.

²⁵ Rather than enabling pooling, as this provision would seem to suggest, small average shares per citizen would effectively compel holders to consolidate shares whether they wanted to or not.

²⁶ Compensation, payable on the excess only, must be paid by 1 January 1995.

²⁷ Theoretically, it would appear that individuals paying compensation for larger than average land shares to the rural committee could find their land appropriated if farm-size limits are exceeded.

used as security (SEC. 7 to 9).²⁸ The rural committee is further authorized by the MAF to allocate plots from the fund and distant pastures to “concrete” land users on lease terms for provisional tenure (SEC. 13).

Joint-stock commercial bankers serving the agricultural sector are holders of certificates in pawn (SEC. 14). In the absence of market prices, the initial cost will serve as the collateral value (SEC. 26). If the owner of the certificate fails to meet his or her financial commitments, the security holder will automatically gain the right to use the certificate (SEC. 17).²⁹

I. ECONOMIC ENTERPRISES (FARM MODELS)

Regulation No. 1/20 and 1/1 of the National Committee on Statistics and the MAF of 4 January 1995 requires the re-registration of all economic enterprises (beginning 1 February 1995) according to the following definitions:

- ◆ **Private farm.** Farm operations are performed by the labor of members of one family (no farm-size limits specified).
- ◆ **Peasant farm.** No definition, though farm operations are presumably performed by the labor of two or more families. Maximum farm size cannot exceed 30 hectares in zones of high and average crop intensity or mountainous zones suitable to livestock grazing.
- ◆ **Agricultural cooperative.** No definition. Farm sizes must fall within the range of 30–100 hectares in zones of high and average cropping intensity and 50–150 hectares in mountainous zones suitable for livestock grazing.
- ◆ **Collective farm (*kolkhoz*).** No definition. Farm sizes on collective (nonstate) property must exceed 100 hectares in zones of high and average cropping intensity and 150 hectares in mountainous zones suitable to livestock grazing.
- ◆ **State farm (*goskhoz*).** Activity based on state property. Farm sizes on state property must exceed 100 hectares in zones of high and average cropping intensity and 150 hectares in mountainous zones suitable for livestock grazing.

While these categories were reportedly designed to systematize the registration of new farming enterprises, the lack of definitions is conducive to both improper application and erroneous interpretation. A number of more important questions arise. Because these economic “subjects” are to cover the re-registration of all enterprises in the KR, do the

²⁸ Without formal survey linking land shares to land plots on the ground, shares would exist on paper only. Land share transactions (like company stock) entail the transfer of ownership rights to the profit or production of a PFE (along with duties of the holder), not the transfer of actual land.

²⁹ In case of foreclosure, it would appear from SEC. 6 that the financial institution would have to give first priority of sale or use to former members of the collective before outside interests. No enabling provision is made for sale to the highest bidder, though that would act to enhance the collateral value of the certificate.

indicated farm-size limits supersede the previous regulations indicated in table 2.1? Is there no limit on private farms?³⁰ Is there no minimum limit on peasant farms?

J. LAND TAXATION

Presidential decree No. 42 of 22 February 1995 on Measures for Improvement of the Tax System in Agriculture formalizes a new tax system for all agricultural land in the KR to have taken effect on 1 March 1995. Tax rates are calculated according to the following formula:

$$T_L = B \times P_f \times 0.041 \times C \times K_1 \times K_2 \times K_3$$

where, T_L is the land tax in *som/ha*, B is the mark of honitet of soil quality, P_f is the price of one mark in grain units, C is the cost of one centnare of grain unit (wheat), 0.041 is the coefficient that shows the part of tax from normative yield, and K_1 , K_2 , and K_3 are correction factors for remoteness (location of land plots), height above sea level (except hayfields and pastures), and economic efficiency. Tax rates (*som/ha*) are given in table 2.2 and parameter values by *oblast* used in calculating tax rates are provided in annex 2.2. The problems presented by filling in the numbers in this abstractly attractive formula seem likely to be very serious, especially in light of the critical impact tax rates will have on land values and even the economic viability of farms.

TABLE 2.2 Rates of land tax in *oblasts* of KR (*som/ha*)

Republic	Arable		Perennials	Hay fields	Pastures
	Irrigated	Non-irrigated			
Republic	142.7	30.8	229.6	11.1	3.0
Osh	229.1	21.1	213.3	9.7	3.1
Djalal-Abad	274.3	27.9	283.3	13.3	5.3
Issyk-Kul	130.4	58.2	210.6	18.5	3.9
Naryn	38.6	15.8	182.0	5.7	1.1
Talas	113.9	23.9	121.4	4.6	2.4
Chui	123.8	33.4	262.0	11.0	3.6

From 1 March 1995, taxes were suspended on profit, use of roads, and the payment of funds for the prevention and resolution of emergencies for those economic subjects who are producers of agricultural goods. Of the taxes collected from agricultural lands, 25 percent is to go to the local budget and rural committees for social development and 75 percent to the

³⁰ The absence of limits would seem to contradict the orders on land shares, which stipulate that any farm enterprise with size limits exceeding the limits in Table 2.1 is to have the excess returned for redistribution.

republic's budget, one-third of which is to be earmarked for state financial support of the land and agrarian reform.³¹

IV. LEGAL ASSESSMENT

A. OWNERSHIP CONCEPTS AND INSTITUTIONS

Outside observers are struck by the difficulty of understanding Kyrgyz law and arriving at answers to legal questions with authority and confidence. The whole point of land reform and the transition to a market economy is to encourage individual actors to participate with enthusiasm by assuring them that, if they do, the consequences will be rewarding and legally predictable. The transition to a market economy is always difficult and uneven, so considerable allowances must be tolerated in the development of a new property system. Yet, observers are also struck by the degree to which lack of careful planning, perhaps in a hurried response to implement reforms, has resulted in confusion in the field.

1. Legal clarity. Land reform cannot be smoothly accomplished unless the laws affecting it are simple, clear, and accessible. Because land reform involves many changes for many people, there is always a danger that it will become mired in doubt and confusion. It is vital that the basic laws of reform be clearly stated so that at least the law itself can be understood by all. Individual property ownership can flourish only under a constitution that allocates power in a clear fashion among all levels and branches of government. In order for confidence in the system to be maintained, disputes over landownership and disagreements between owners and government agencies must be reviewable by truly independent courts.

2. Legal certainty. The basic principles of landownership must be agreed on for a reform program to succeed. In this respect, ART. 4 of the Constitution is worrisome, for it states that, though private ownership is recognized, all land belongs to the state. Other laws and decrees are similarly phrased. It would be a mistake to gloss over the significance of doubt on this central point. Assuming there is a complete commitment to thoroughgoing land privatization, it is essential that all concerned understand this. If the commitment to the full process is uncertain, then it is inevitable that everything that follows will be compromised and ambiguous. This would likely ensure that land reform could never really succeed. There should be no ambiguity on fundamental principles. A clearly supportive interpretation of the Constitution and law by government and the courts is necessary.

3. Body of the law. The current array of code provisions, land laws and decrees, rules and regulations issued by various government bodies is almost impenetrable. One is not sure one is reading the applicable law, and one cannot be certain that the subject of one law or

³¹ ART. 31 of the draft land code stipulates that land tax receipts and revenues collected as compensation for agricultural and forestry protection losses shall be used for purposes of financing measures for land protection, soil fertility improvement, land engineering works, state land cadastre, land monitoring, land protection and use, and construction and maintenance of roads and infrastructure.

decree is not also covered elsewhere. Thus, there appear to be contradictions among the Constitution, Civil Code, and draft Land Code respecting transfers of private land. It is argued by some that such contradictions are allowable because the Civil Code and Land Act are both in draft form. They are nonetheless being implemented, at least in principle; therefore, the legal contradictions and economic restrictions in the law provide a very precarious basis. Outsiders will have a greater problem in this respect than those who actually work within the system. On the other hand, when trained lawyers cannot understand the basic law thoroughly, this should be a warning sign for the many farmers and nonlaw-trained officials who will have to administer the program. The problem can only get worse as more and more rules are enacted as the reform process matures.

4. Constitutional structure. A part of the legal uncertainty in the KR stems from the general newness of its democratic system. To some degree, this is not a solvable problem—the Constitution will take decades to evolve into its more or less permanent form. It is appropriate to point out, however, that land reform and private landownership as an institution depend on a fixed and protective constitutional order. Security of tenure is the most fundamental feature of landownership. To preserve that security, an independent judicial system is indispensable. So is a viable legislature and a restrained executive as well as a clear demarcation of local and national authority. These are all matters well beyond the scope of an evaluation of a specific land reform effort; but, without them, the effort in the end may simply fail.

5. Private ownership. Land reform usually proceeds from the premise that the land belongs to the people on it, not to larger groups, wealthy oligarchs, or governmental or political bodies. There will always be various restrictions on ownership and use, and there will be taxes and other obligations imposed on owners. However, the central assumption of ownership is critical. Some of the basic law seems ambiguous on this point. Thus, ART. 4 of the Constitution, ART. 148, SEC. 3, of the Civil Code, and ART. 2 of the draft Land Code are disquieting. So are restrictions on who can own land, such as excluding foreigners (and foreign corporations or corporations with partial foreign ownership); or exempting some categories of valuable agricultural land from private control; or limiting the duration of ownership, especially for so short a period as 49 years; or limiting the maximum or minimum size of privately held plots; or authorizing complete forfeiture of landownership rights, without compensation, if the owner has failed to meet the state's expectations with respect to the use of his land; or limiting strictly the use to which the owner can put his or her land, such as only "rational" use or only agricultural use. The cumulative effect of these provisions could be very negative.

There are many burdens on ownership scattered throughout the law. When they become too many, they may chill the desire for ownership. Generally, the original transfer of ownership seems to be free, though Decree 632 of 22 August 1994 casts some doubt on this, for it identifies an "initial cost," set at 25 times the tax rate, for the right to use land (even if it adds that this cost need not actually be levied at the time of the original transfer). More broadly, there are potentially high, and progressive, land tax impositions, especially under the 27 February 1995 decree, which will be intimidating to many putative owners. There are also severe environmental burdens, for example, under ART. 21, 69, 70, and 84 of the November

1994 draft Land Code. Finally, new owners are made liable for 50 percent of the existing debt of state farms, and 75 percent of the debt of collective farms. Given all the present difficulties with financing, with obtaining agricultural machines and equipment, with transporting and marketing produce, with weather risks, and all the burdens just noted, how eager will today's farmers be to become tomorrow's owners?

With these issues in mind, a number of concrete recommendations (R) are offered.

- R2.1** Some of the restrictions on ownership noted above need to be removed or moderated if real private property is to succeed. There are too many limitations and obligations now in place to be certain of long-range success in expanding private property ownership.
- R2.2** Consistency and coherence are needed throughout the entire body of legislation and regulations. Until such compatibility is achieved, there should be a pause in the rapid pace of new orders, decrees, and other regulations that add to the ever-lengthening list of restrictions and burdens imposed on new landowners.
- R2.3** Create one, single Land Law that covers the entire field of ownership. When additions are needed, they could be worked into the organization of this single draft (and any provisions modified could be repealed and removed). A person trying to figure out what the law is could then be confident that she or he had **all** of it in hand in a form that was complete and automatically up-to-date.
- R2.4** Put process rules in a separate but equally complete and up-to-date collection.
- R2.5** Create a comprehensive "definitions section" with a single, universally applicable definition for every esoteric term in the land law, so that all readers start with the same understanding of the law.
- R2.6** Spell out the hierarchy of authority to interpret and apply the Land Law as precisely as possible. It is especially important that local officials, who may be bewildered by the whole process of reform, know what their power is and what the limits on that power may be. The same may be said for the courts.
- R2.7** Publish an explanatory treatise describing in general terms the purpose and process of land reform. Such a text would not be legally binding and could afford to be much simpler, more straightforward, and more understandable than the official "law" itself. This would help ensure that nonlawyers could work with the system and may be of great help to lawyers, judges, and government officials as well.

6. Expanded ownership concepts. The long-term development of private property ownership would be enhanced if a whole variety of ownership interests was recognized. Restricting ownership to the life of an owner, for example, can impede development possibilities and slow the transfer of property. It took centuries for sophisticated notions of

future property rights, concepts of joint and common tenancy, condominium and cooperative ownership schemes, and ideas of ownership in trust for the benefit of others to develop in the West. The KR might be able to accomplish similar legislation with the stroke of a pen.

7. Land registration. It is vital that a comprehensive system of land and title registration be set up and locally administered. Individual ownership of land usually connotes that an owner has “title” to the property. Title ownership carries certain obligations, such as the duty to pay taxes on the land. The principal attribute of title is that it is freely transferable to others. In most systems recognizing individual ownership, title is transferred by delivery of a formal deed to the property. However, before parting with the purchase price for the deed, most buyers want to know with certainty that the seller actually owns it and that the property is without encumbrances. The principal function of title registration is to provide proof of the owner’s interest in the property to the satisfaction of buyers, lessees, mortgagees, and others. The method of registration is easy enough—all transactions respecting the property (or respecting the owner of the property) are officially recorded and kept at a locally accessible place, so they can be checked before any future commitments are made. In addition:

R2.8 Registration should be local, because most buyers, lenders, and others interested in the title status of the property will be local themselves. Central registration by the state, as called for in ART. 15, may serve as a useful backup but should never be relied on as the sole place of registration.

R2.9 Registration forms, including deeds, mortgages, and evidence of title, should be uniform throughout the country, but they should be kept as simple as possible, so local registrars will be able to tell easily whether documents are recordable. (It is not obvious that the formality of notarization should be required, as in ART. 14 and 26 of the 1994 Land Code). Buyers, lenders, and others should be able quickly to review all the recorded documents respecting the property or the owner.

R2.10 Buyers, lenders, and others who rely on the recorded status of property should be protected against unrecorded and unrevealed interests. It is not necessary in the first years of the farm reorganization program to have a complete system of registration in place, because the original title from the government to the first private owner will be relatively certain. As time passes, however, it will become vital that a thorough and efficient system be implemented.

B. OTHER PERIPHERAL LEGAL ISSUES

There are several other peripheral areas of law that will need attention before the process of land reform can be complete.

1. Water rights. Water rights law will be vital to the growth of a private property system on land, whether agricultural, residential, or commercial. Some water rights legislation has been adopted but consideration might be given to basic institutions respecting the

ownership of water. To the extent that ownership is allowed to private persons, riparian, appropriation, reasonable-use systems, or other forms of ownership are possible. Cooperative ownership and shared ownership with the public may also be important, particularly respecting existing and future irrigation supplies. At some point, it will probably be necessary to spell out ownership of ground water.

2. Common pasture. It is important to spell out precisely what pasture rights may attend landownership, particularly respecting seasonal common pasture grounds. Because private landowners will have different pasturing incentives than the former public owners, a new sort of environmental control may be necessary to prevent overgrazing.

3. Land finance. Private ownership of land depends on the availability of financing, both for the purchase of the land and for operations on it. It will not be possible suddenly to create a full-blown system of private and public finance; however, early legal institutions should anticipate and facilitate the growth of such a system. In addition, thought should be given to the terms of mortgages and other financing arrangements, including the precise dimensions of the security interest of a lender. Consideration should be given to owner-borrowers, too, respecting their tenure security. Thus, they should be given an opportunity to cure missed payments and given careful protection at any sale of their property forced by creditors. It might be advisable to provide special protection for the spouses and families of owners through homestead exemption laws and possibly even through marital property laws. Clear legal rules are also needed respecting financing arrangements for personal property, particularly for implements used in agricultural production. Laws should be in place not just to protect the security of lenders in such circumstances but also to facilitate co-ownership of farm implements by private owners or by private and public owners.

4. Easements. In addition to the array of property interests suggested above, easements can be a useful property device. (So can negative easements, or private restrictive covenants on the land.) In particular, if large public estates are broken up, it might be important to recognize an automatic easement of necessity to ensure access to interior plots.

5. Takings. A carefully constructed law of eminent domain is another basic requirement of a successful private property system. All societies recognize the need for some public regulation and control over private land, but it is equally obvious that untrammelled public authority to take over private land without paying for it will seriously undermine any ownership system. The United States is currently in the midst of a profound national debate on questions of where to draw the line between a “taking” and a mere “regulation.” A lot of trouble and confusion might be avoided if an attempt is made now to set rough guidelines on this issue through legislation. It would be important also to specify firmly that under no circumstances can private property be taken at all, even if compensation is offered for the taking, unless it is for a “public” purpose—that is, once privatized, a plot cannot be reallocated to a different private owner. (ART. 22 and 23 of the Land Code are reassuring on this point. It is not clear, however, that land can be taken only for public use, and the compensation sometimes contemplated—the provision of an “equally valuable” land plot to the dispossessed

owner—may not always be adequate. Also no provision is made for re-reimbursement of an owner’s legal and other transactions costs that may attend a contested taking.) Above all, however, the easy forfeiture provisions of Chapter VIII, ART. 34–39 of the present draft Land Code should be reconsidered.

6. Adverse possession. Particularly for the first several years or more after the introduction of a private property system, there may be inevitable confusion about the ownership of some land. This is likely even if a comprehensive record scheme is instituted. A partial antidote for some of this confusion might be to codify rules respecting adverse possession. In light of a desire to ensure that private owners use their property rather than merely speculate on it, it might make sense to allow a short adverse use period (ten or even five years) to be sufficient as against newly endowed property owners.

7. Nuisance law. In a similar vein, it might be helpful if a basic nuisance law were enacted. It is not likely that nuisance laws will ever be a complete substitute for full regulatory environmental protection, but there are instances when they can serve a valuable role in solving disputes over land use. If the principles of nuisance law were recognized, this might obviate, or at least diminish, the necessity for some of the drastic remedies suggested in the draft Land Code for environmental misdeeds. (These remedies include heavy fines in ART. 84 and, as noted, possible land confiscation under ART. 34.)

In summary, the follow specific recommendations are proposed:

- R2.11** Publish comprehensive laws respecting easements (especially easements of necessity for interior plots created upon original land distribution); respecting negative easements or private restrictive covenants on land use; respecting intestate succession of land and other property and the rules for bequeathing the same, including possible protections for spouses and other members of landowners’ families; respecting water rights; respecting common pasture rights; and respecting the ownership of natural resources below the land surface.
- R2.12** Distribute rules facilitating the availability of credit, with or without government guarantees or assistance. Here will be needed laws respecting the conditions of lending; of the security lenders can count on, and of the protections against forfeiture and ruin that borrowers can rely on.
- R2.13** Publish clear rules respecting shared ownership of property, including land and personal property.

V. ECONOMIC ASSESSMENT³²

Law has many implications for economic behavior, the agrarian structure that emerges in the agricultural sector, and resource use. The following comments relate to some of the possible economic consequences of the land reform process to date, with particular reference to the draft Land Code. Eleven areas of the law are considered.

1. Lease conditions. According to the draft Land Code, land rights are segregated into common land use, which may be granted to all legal and physical persons, and special land use, which includes the right of life inheritance (permanent or temporary) and must be confirmed by a state act or certificate confirming the lease agreement (ART. 5). Land plots held by the state by lease for special land use have wide flexibility (ART. 6.1), but the duration of rights is limited. Land granted for permanent use (no fixed term of lease) would be granted to state, cooperatives, public enterprises, joint-ventures, and other such legal entities (ART. 6.2). Land for temporary use may be short-term (up to five years) and long-term (up to 49 years) to citizens (and foreign legal persons) who hold land shares for farming. Terms may be extended by the granting body but prolongation cannot exceed the earlier fixed term (ART. 6.3 and 6.4). These provisions raise a number of concerns and recommendations:

R2.14 Offering unlimited term leases to cooperatives and joint ventures will end to bias landownership in agriculture to cooperative forms of management, contradictory to intended aims of stimulating peasant farm expansion. The distinction between permanent and temporary leases should be either eliminated or made clear that permanent leases apply to public institutions only.

R2.15 There appears to be little justification for the distinction between short- and long-term leases. The leasehold policy requires government to become a landlord and to bear the costs of negotiating and monitoring contracts. Such costs may be acceptable for long-term leases in which the turnover is low, but, as indicated in chapter 5, rural committees are renting out land from the NLF on the basis of annual rentals. Considering international experience, such leasing policies will ultimately result in excessive management costs. It is thus advised that government redistribute all public lands as long-term leaseholds or freeholds as soon as possible; by placing land in the hands of individual landholders, it essentially will be transferring annual leasing functions to the private sector.

R2.16 The fact that renewals cannot exceed the original lease term is overly restrictive (especially if the registry is trapped into 5-year leases). As discussed below, the term of 49 years is probably restrictive for most long-term investments.

³² This section draws heavily on the 1994 draft Land Code of the KR. While not promulgated, its content fairly well reflects the current policy position of the government of the KR.

2. Philosophy of property ownership. State issuance of long-term usufruct through leaseholds is the hallmark of land policy in many countries where state ownership is strongly endorsed. In contrast, the hallmark land policy in a private market system is the ability and capacity to hold, freely transfer, and use property in freehold, supported by constitutional guarantees. In such a system, the state collects necessary revenues from taxes levied on land, income, and other sources rather than collecting revenues for “rent.” Excessive land concentration is controlled by making landholders pay proportionally higher taxes per unit of land area as total farm size increases. This essential distinction is blurred under the present Constitution and other laws of the KR. New constitutional amendments under consideration which permit private ownership of land and property would permit development of a freehold system that, if adopted, could allow government to focus its work on truly public functions of land registration, taxation, and regulation, while allowing the private sector greater autonomy and responsibility for land rentals. Experience from around the world continues to show that leasehold systems (especially systems where government simultaneously leases and taxes the land, controls transfers, and enforces onerous land use regulations) are expensive to maintain. Inevitably such governments either are unable to bear the costs of the system or fail the task of efficiently managing the land. Government’s reluctance to fully divest itself of land management functions is perhaps understandable given the former history of centralized planning; yet there is concern that government will not be able to bear all the costs of land management that it has set for itself.

3. Lease duration. The current term of 49 years, while suitable for some land-use decisions, is not adequate for longer-term investments such as the construction of buildings or the installation of irrigation facilities. Nor does it respond to farmer concerns about the ability to bequeath land to spouse and children.

R2.17 If new constitutional amendments permitting private property are passed, government should consider adopting a freehold system to reduce costs and to allow greater focus on other critical areas of regulation and taxation.

R2.18 If it is not possible to establish freehold ownership, two steps would help alleviate some of the problems caused by the 49-year term: (a) the term should be lengthened to 99 years or longer; and (b) the lease should be made automatically (even perpetually) renewable or renewable on the written request of the landowner.

The objective is to make it difficult or impossible for the government to take back the land except for purposes of justified eminent domain. While land-use regulations stipulating minimum safeguards against environmental protection are justified, any such controls stipulating minimum levels of land-use efficiency will be impossible for the government to monitor or enforce in the courts over the longer term and will further risk undermining the land price and security of use rights.

4. Mortgages and land price. As long as renewability is in doubt, leases make poor instruments to support mortgages. The key measure of land value, the negotiated price that the

buyer is willing to pay and the seller is willing to accept to part with the land parcel, is complicated if there is any risk that government can appropriate the land after the lease term or earlier or if land market restrictions significantly impede or increase the costs of land transfers. The price a buyer would pay for the land would naturally decline as the 49-year term was used up, creating the opportunity for severe dislocations in the land price and tenure insecurity. Procedures used by government to reallocate land also need to be carefully studied. If no purchase price is charged, the landholder has an incentive to seek credit then abscond with funds at little or no cost. The mortgage value of property will be very much in doubt.

5. Termination of leases. Under the draft Land Code, it is relatively easy for owners to lose property altogether, if they do not use the land for agriculture (ART. 3). They may also be fined if the land is not “rationally” used (SEC. 5 of ART. 84). Environmental obligations are also heavy. This could chill the incentive to become an owner; it could also dampen the enthusiasm of lenders to extend credit to new owners desperately in need of financing to help pay for land acquisition costs, rental obligations, taxes, machinery, seed, and the myriad other expenses likely to beset them as agricultural entrepreneurs.

6. Land use rights. In some respects, the draft Land Code is suitably expansive. Owners may independently farm the land; utilize mineral, water, and natural resources for farming operations; make ponds, water reservoirs, and irrigation structures; alienate the property or exchange it for another plot; mortgage the land; lease it; use it to form shareholder societies, partnerships, and cooperatives; and bequeath it (ART. 20). But the draft Land Code is also restrictive. For example, an owner must restore, even improve, soil fertility and protect against plant diseases, weeds, bushes, and other pests; must undertake timely crop rotation; and must protect against all sorts of erosion and pollution (ART. 21, SEC. 1, and ART. 70 and 71).³³ Some of these provisions substitute the judgment of government for that of the owner as to how best to use the land, thus undermining one of the strongest economic reasons for moving to a market system. Unless the costs for such obligations are borne by the public, they could prove impossibly heavy for new owners.

7. Land categorization. ARTICLE 4 of the draft Land Code specifies seven allowable land-use categories—agricultural purpose land, municipal land, other nonagricultural land, special or protected territories, forestry fund land, water fund land, and land reserve (including the national and special funds and the land redistribution fund) (SEC. 1). SECTION 2, stating that these lands shall be used in accordance with their approved purpose, and that transfers from one category to another shall be done in accordance with land-use plans approved by government bodies, risks imposing onerous costs on landholders and undermining the fundamental principles of private landownership. It will become difficult for government to enforce land use as small enterprises increase in number. In the case of fund land, it is doubtful

³³ Under ART. 70, the land user or lessee is required to restore and improve soil fertility, protect the land against erosion and pollution of all types, protect the land from plant diseases, weeds, bushes, and pests, recultivate and restore spoiled lands, undertake timely crop rotation, and conserve the topsoil during construction works. Allowable limits for concentration of chemicals, bacteria, parasites, radioactive substances, and other harmful elements are to be spelled out in the regulations (ART. 71).

whether lessors have adequate land rights to make improvements; moreover, state control over leasing and reallocating land is perpetuated.

8. Land use restrictions (breach of lease). Rights to land may be terminated when land is not used according to its intended purpose, when breaches are not corrected in the designated time frame, and when more than 50 percent of agricultural land stays unused for three years (ART. 34). Furthermore, for agricultural land not used for its intended purpose for more than one year, the local self-governing body, after fining the user, may demand that the plot be leased out for up to five years to any person it recommends (ART. 39). Such restrictions appear excessive in two regards. First, the distinction between acceptable and unacceptable land use is not always clear (for example, fallow versus idle land). Second, in the case of residential and commercial property, the landholder's sizable investment in property is at risk of being undermined by acts beyond the owner's control—economic downturn, oversupply of residential and office space, and so forth. Both of these provisions are difficult to discern and enforce in a court of law and will require substantial enforcement costs. Yet land engineering in ART. 76 of the draft Land Code clearly has land-use enforcement in mind: rational land use is to be planned in all sections of the economy, land used according to its approved purpose is to be insured, and measures for cultivating new and existing lands are to be designed (SEC. 2). Such planning by administrators runs the risk of increasing demands on the state budget for enforcement, while obstructing land transfers to the highest and best value by administrators who make wrong decisions or fail to approve conversions in a timely fashion.

R2.19 The numerous references to land-use controls and state planning throughout the draft Land Law strongly reflect the continuance of a centralized planning mentality in government agencies dealing with land. The many tasks established for land engineering should be substantially toned down and financial programs created to provide farmers with incentives to carry out appropriate conservation and land-use measures. The restrictions on private land use and ownership rights are substantial. Many if not most of the land-use restrictions under which leases may be revoked should be eliminated. Finally, government should carefully consider tax policy and land market policy as alternatives to regulatory controls in encouraging efficient land use.

R2.20 Land in agriculture will decline in value as the uncertainty over lease renewal increases or as land-use restrictions become more onerous. Government is advised to keep land restrictions to a minimum and to make leases revocable only under exceptional circumstances.

R2.21 A clear termination date for permanently redistributing land in the NLF should be set, after which remaining land should be auctioned off or distributed to disadvantaged populations. Clear guidelines should be set and widely advertised for distributing such land, particularly to people living outside the domain of the rural committee. In order to handle the possibility that demand far exceeds the supply of land available, the government will wish to set minimum qualifications for bids and may also wish to give

priority to resident households.³⁴ While the date for termination of the land fund is debatable, a three-to-five-year time horizon would seem appropriate.

R2.22 Land shares may be initially assigned to individuals with or without a price attached. Current policy calling for the land cost to be 25 times the existing tax rate seems excessive given the present high rate of inflation, high nominal interest rates, and the fact that many farmers in rural areas consider tax rates excessive compared with their currently depressed levels of farm profitability. There are several policy options: (1) lower tax rates in rural areas; (2) lower the land cost from the current factor of 25 to a more appropriate level (7–15)³⁵; or (3) redistribute any landholdings after the initial distributions by auction to allow prices to be set by the land market.

R2.23 Any future redistributions of land after the initial apportioning of land shares should be sold to land acquirers either at prices determined in auctions or by other appropriate assessments.

9. Maximum and minimum size limits. Maximum limits on farm size, while perhaps necessary for encouraging the breakup of the former state and collective farms and for long-run equity concerns, may also discourage the most efficient farms from reaching their optimum size. This optimum will vary from farmer to farmer and is dependent on which crops are grown. (A vegetable or poultry farm might fit within current limits, but a wheat or cattle farm probably would not.) Further, scale efficiency is dynamic; optimal farm size will vary upward and downward in response to market prices, changes in technology, and the income gap between rural and urban employment. The ability of government to monitor and change maximum size limits flexibly to meet such factors is doubtful.

There are no evident benefits to a minimum farm size. The reasons most frequently used to justify such minimum limits—lumpy inputs (such as buildings and tractor fleets) or minimizing demands on land registration systems—can be otherwise dealt with through alternative policies (through equipment rental services or shared ownership of equipment, for example; or through group land registrations). Meanwhile, the costs of limiting minimum size are considerable: they limit the ability of households to freely dispose of land, they reduce the number of potential land buyers, and they force the consolidation of multiple households into peasant farm

³⁴ As seen in chapter 5, many heads of rural committees and many heads of farm enterprises report an excess supply of labor. Demand for labor on newly formed farms will increase with improvements in land-use intensity and the substitution of labor for capital-intensive technology. Yet as land market restrictions ease, the demand of individual families for land will probably increase as well; those demands will be revealed first and foremost in the bidding for annual land rentals and applications for leases of NLF.

³⁵ A number of methods exist for determining the land value: (1) pegging value to market price; (2) carrying out auctions in different localities of the country and pegging the land value to prices set by the auction rate; (3) using replacement value of investments in the land; or (4) determining land profitability adjusted by the real cost of capital. The mortgage value of land will vary inversely with nominal interest rates. Hence, any factor used to convert tax rates into the land prices should be adjusted semi-annually or annually depending on interest rate fluctuations.

enterprises when smaller farms might be easier to manage.³⁶ Government's relaxation of the minimum when the situation commands, as recently happened in Osh *oblast*, reinforces the perception of government as whimsical, imposing policy ad-hoc.

10. Taxes. It is often possible to achieve desired economic goals more smoothly through carefully tailored tax incentives than by direct command and control regulation. Thus, the government's concern about equity and the prevention of fragmentation could be handled by a well-designed tax system. If such system were made progressive, based on farm size and land value (pegged to market prices or a simple land-quality index), this would inhibit speculation without greatly interfering with an owner's aspirations about the land. If the experience of other countries is a useful guide, however, the tax system should not be too complex. It is possible that the tax rates based on soil quality and market factors of 27 February 1995 Decree on Land Taxation are too complex to enforce at the peasant farm level and will not adequately capture changes in land price from urban and commercial uses in the longer term. Ideally, the tax system ought to be based on tax rates carefully calculated from projected *rayon* expenditures and a tax based on land market values pegged to real estate prices. Unfortunately, price formation in the land market is weak, and it is unlikely that such a system will be possible for years to come.

11. Debt. The state's shifting of past debts of collectives and state farms risks becoming a significant constraint to the development of newly formed enterprises, whether private farms, peasant farms, or agricultural cooperatives. Even with a two-year grace period, such a policy is bound to be counterproductive in initiating private enterprise, particularly given the current agricultural crisis and given that much of the debt will not be seen by the farmers as of their making. Some debts were due to outstanding "accounts receivable," if the former state or collective farm was not paid for its sales before the old system broke down. Other debt was created by mismanagement or extravagance on the part of the old farms' managers, who may or may not be members of the new enterprises. The consequences of starting out in debt are serious. The new enterprises will thereby be made less creditworthy at precisely the time of their greatest financial need. Banks will be reluctant enough to lend to farmers on the security of 49-year leases; added debt obligations of the farmers will only increase this reluctance. It might thus be both unjust and unfortunate to saddle the new enterprises with this debt—enough so, possibly, as to seriously threaten the pace of reform. It is clear that more thought needs to be given to this difficult problem, for the government does not have the resources to pay the debts either.

R2.24 It is extremely doubtful whether government can regulate size controls without creating land-use inefficiency. Minimum farm-size limits should be eliminated for all categories of farming operation (one exception may be minimum lot sizes in urban areas.)

³⁶ See, for example, ART. 45 (draft Land Law) which states that when the right to an agricultural use plot is inherited by several heirs, the plot cannot be subdivided if any subdivision is smaller in size than minimal plot sizes established by law; in such cases it is to be inherited as common property.

R2.25 Maximum limits on farm size do not appear to be a serious concern of rural farms at present, but, because of the dynamics of scale economies, problems could emerge in the future. It is thus advised that the maximum farm-size limits be increased (perhaps by 50 percent)³⁷ to ensure they do not overly constrain farm profitability (they will nonetheless control for excessive land accumulation). However, such ceilings should have a well-defined termination date (5 years) or their termination made contingent on a careful review of the land market's performance in valuing land and property and the progress being made in implementing a progressively based land-tax system.

R2.26 If the government wishes to proceed with the current plan of assigning debt to newly formed enterprises, then it should make sure that the interest rate assigned is sufficiently low so as not to seriously compromise farm profitability and that the grace period is long enough to endeavor enterprises and reforms to get off to a healthy start.

R2.27 Tax values in most market economies are determined by tax rates applied to market value of property. Because property assessments are made difficult by lack of price formation in the real estate market, the KR government has designed a system based on land productivity and soil quality indicators, adjusted for market location. The tax formula as now designed is probably more complex than is needed but probably can be adapted to local areas if *rayon* administrations are granted flexibility. However, *rayon* governments rather than national government should determine the tax rates in accordance with local conditions.

VI. CONCLUSIONS

Overall, the policies formulated by the government over the past year have greatly improved the chance for successful land and agrarian reform, but improvements are needed. The first, and most obvious, is that several of the restrictions on ownership noted above will need to be removed, or at least moderated, if real property privatization is to succeed. There are too many limitations and obligations now in place to be certain of long-range success.

Second, some of the subsidiary law suggested above should be developed and, after careful review, integrated into the basic, central Land Code. In particular, it is critical that a comprehensive, locally based, land registration system be set up. There should also be prompt consideration of development of the law in such areas as co-ownership, condominium, leasing, and credit security.

What may most be needed now is consistency and coherence in the whole program. By now farms and government officials are equally uncertain of which decrees and rules apply, in which order to implement them, and how long their provisions will remain unchanged. It is thus possible that a thorough assessment of the program should be undertaken and a mid-

³⁷ Actual maximums should be determined by rigorous research on farm-size efficiency.

course evaluation made. In the meantime, it might be appropriate for there to be a pause in the rapid pace of new, sometimes seemingly ad hoc administrative regulation, so that government and the public can become familiar with the program. All the basic institutions of landownership should be thoroughly and confidently in place as the program proceeds toward implementation.

ANNEX 2.1
LAND LEGISLATION REVIEWED, KYRGYZ REPUBLIC

Date	Legislation	Russian language	English translation
28 May 1987	Decree No. 307 of the Central Committee of the KCP and Council of KSSR Ministers, On Measures for Increasing Pasture Productivity		yes
2 Feb. 1991	Law on Peasant Farms	yes	yes
19 Apr. 1991	Changes and Additions to the Law of KR on Peasant Farms	yes	yes
6 Feb. 1991	Law of KR on Enterprises in Republic of Kyrgyzstan	yes	
19 Apr. 1991	Law of KR, On The Land Reform.	yes	yes
1 June 1991	Land Code	yes	
6 July 1991	On Ratification of the Regulations, Terms and Procedures (Decree No. 268 of the Cabinet of Ministers) for Droving Livestock on the Territory of the KR		yes
31 Aug. 1991	Law of KR on Changes and Additions to the Land Code of the Republic of Kyrgyzstan	yes	yes
19 Apr. 1991	Law of KR on Land Reform	yes	yes
19 Apr. 1991	Decree of the President of KR on Measures for Implementation of the Land Reform in the KR		
6 July 1991	Regulations, Terms and Procedures for Droving Livestock on the Territory of the KR, Decree No. 268		yes
10 Nov. 1991	Presidential Decree, On Emergency Measures for Ensuring Realization of KR Laws Regulating Land and Other Relations in Agriculture	yes	yes
10 Dec. 1992	Decree of the President of KR, On Measures for Continuing Implementation of Land and Agrarian Reform in the KR	yes	yes
5 May 1993	Constitution of the KR, Adopted at the 12th Session of the Supreme Soviet of the Kyrgyz Republic	yes	yes
n.d.	Regulations Governing the Provision and Use of Close and Distant Pastures in the KR		yes

24 Jan. 1994	Decree No. 30 of the Prime Minister, On Production Stimulation and Agricultural Product Sales in 1994		yes
10 Feb. 1994	Presidential Decree, On Emergency Measures for Strengthening State and Financial Discipline		yes
22 Feb. 1994	Presidential Decree, On Measures for Enhancement of the Land and Agrarian Reform in the KR	yes	yes
4 May 1994	Regulation on Order of Water Resource Distribution and Exploitation of Economy Net of Water Users, No. 284, and attached rules	yes	yes
8 June 1994	Ministry of Justice, Charter of the Agrarian Alliance		yes
19 Aug. 1994	Draft Land Code of the Kyrgyz Republic	yes	
22 Aug. 1994	Rule on Implementation of Land and Agrarian Reform, No. 632	yes	yes
22 Aug. 1994	Rule on Reorganization of Agricultural Enterprises, No. 632	yes	yes
22 Aug. 1994	Rule on Order of Finding Out the Land Share of Citizens and Giving Certificate of Land Use, No. 632	yes	yes
4 Oct. 1994	On Adoption of the List of Seed and Pedigree Agricultural Enterprises of the Republic of Kyrgyzstan., No. 745	yes	
4 Nov. 1994	Memo from the Rural Development Institute (Prosterman and Rolfes) to Minister Talgarbekov of Agriculture and Food on Vital Issues Affecting Agrarian Reform in KR		
23 Nov. 1994	President Akaev's Speech at the Meeting of Heads of Local Self-Government of the Republic of Kyrgyzstan	yes	yes
Nov. 1994	Draft Land Code of the Republic of Kyrgyzstan		yes
7 Dec. 1994	Proposals on Changes and Additions to Constitution of the Republic of Kyrgyzstan	yes	yes
6 Jan. 1995	Program of Land and Agrarian Reform for the KR for 1995–1996, No. 5	yes	
	-- 22 Feb. 1994, On Measures for Enhancement of the Land and Agrarian Reform in the KR	yes	yes
	-- 25 Mar. 1994, No. 743, Regulation of KR on Top Priority Measures for Enhancement of Land and	yes	yes

	Agrarian Reform in the KR		
	-- 25 Mar. 1994, No. 148, Rule on Rural Committees for Land and Agrarian Reform in the KR	yes	yes
	-- 19 May 1994, No. 345, Regulation on Adoption of Rule of National Fund	yes	yes
	-- 19 Mar. 1994, No. 345. Rule on NLF	yes	yes
	-- 22 Aug. 1994, No. 632, Rule on Implementation of Land and Agrarian Reform	yes	yes
	-- 22 Aug. 1994, No. 632, Rule on Reorganization of Agricultural Enterprises	yes	yes
	-- 22 Aug. 1994, No. 632, Rule on Order of Finding Out the Land share of Citizens and Giving Certificate of Land Use	yes	yes
	-- 4 Jan. 1995, No. 1/20 and 1/1, Regulation of the Board of National Committee on Statistics and the Board of the MOAF of KR, On Re-Registration of Economic Subjects in Agriculture.	yes	yes
	-- 4 Jan. 1995, Attachment to No. 1/20 and 1/1, Criteria for Finding Out Names of Economic Subjects in Agriculture.	yes	yes
	-- 23 Jan. 1995, No. 3, Regulation of the Management of Land and Agrarian Reform within the Ministry of Agriculture and Food of KR, On Commission for Implementation of Land Reform and Reorganization of Agricultural Enterprises	yes	yes
	-- 23 Jan. 1995, Attachment to No. 3, Rule on Commission for Implementation of Land Reform and Reorganization of Agricultural Enterprises.	yes	yes
	-- 25 Jan. 1995, No. 4, (no name).	yes	
	-- 26 Jan. 1995. No. 5, Rule on Reorganization of Seed, Pedigree, and Experimental Enterprises of KR	yes	
	-- 8 Feb. 1995, No. 7, Regulation on Management of Land and Agrarian Reform with the MOAF of KR on NLF.	yes	yes
	-- 16 Feb. 1995, No. 42, Regulation of KR, On Debts of Reorganized State and Collective Farms.	yes	yes
18 Jan. 1995	Memo from Rural Development Institute (Prosterman, Rolfes, Hanstad, and Mitchell) to Talgarbekov, Oskonbaev, Kasimov, and Dorosh; Comments on the Draft Land Code of KR		yes
22 Feb. 1995	Decree of the President of KR, On Measures for Improvement of the Tax System in Agriculture, No. 42.	yes	yes

ANNEX 2.2
PARAMETERS FOR ESTIMATING THE LAND TAX

Table A2.1: Mark of honitet of soil and use rate of land tax

Mark of soil honitet	Rate of tax (som/ha)			
	Tillage (field)		Perennials	Hay fields
	Irrigated	Nonirrigated		
0-20	90	42	353	19
21-30	91-136	43-64	354-530	20-30
31-40	137-183	65-75	531-707	31-41
41-50	184-228	86-106	708-884	51-60
51-60	229-274	107-128	885-1,060	52-62
61-70	275-320	129-149	1,061-1,237	63-72
71-80	321-365	150-172	1,238-1,414	73-82
81-90	366-410	173-193	1,415-1,591	83-93
91-100	411-458	194-214	1,592-1,768	94-105

Table A2.2: Correction coefficients to rate of land tax to tillage

On the location of plot (K1)			On height above sea level (K2)	
Destination to market (km)	Correction of coefficient for the state of roads		Meters above sea level	Correction factors
	Asphalt-cement	Gravel-unmetalled		
0-20	1.00	0.95	0-1,000	1.00
21-40	0.95	0.90	1,000-1,500	0.90
41-60	0.90	0.85	1,501-2,000	0.80
61-80	0.85	0.80	2,001-2,500	0.70
81-100	0.80	0.75	2,501-3,000	0.60
101-120	0.75	0.70	3,001	0.50
121-140	0.70	0.65		
141	0.65	0.60		

Table A2.3: Correction factors of economic efficiency at *oblasts* according to types of agricultural land usage

Republic/ <i>oblast</i>	Tillage		Perennials	Hay fields	Pastures
	Irrigated	Nonirrigated			
Republic	1.56	0.81	0.67	0.44	0.45
Osh	2.49	0.58	0.57	0.37	0.42
Jalal-Abad	2.65	0.84	0.54	0.51	0.53
Issyk-kul	1.47	1.12	0.77	0.66	0.57
Naryn	0.71	0.79	-	0.27	0.28
Talas	1.28	0.56	0.40	0.25	0.38
Chui	1.15	0.85	0.	0.49	0.48

Chapter 3

AGRARIAN STRUCTURE

by

James Delehanty and Katie Rasmussen

I. INTRODUCTION

This chapter describes the organization of agricultural production in the Kyrgyz Republic (KR) before and during the land reforms of 1991–1995. It has been compiled using statistics from the Ministry of Agriculture and Food (MAF), the State Statistical Committee, the State Institute for Land Resources and Land Engineering, and Land Tenure Center (LTC) research.¹ The main intent of this chapter is to document the effects on agrarian structure of the legal evolution described in chapter 2.

II. AGRARIAN STRUCTURE BEFORE 1991

A. LAND USE AND PRODUCTION

Agriculture was the Kyrgyz Republic's leading sector during the late Soviet period, generating half of the republic's exports and one-third of its GNP. Livestock and livestock products, especially meat, dairy products, and wool, were the major outputs, accounting for 60 percent of the gross value of agricultural goods. The importance of the livestock sector is reflected in land-use statistics: 45 percent of the land area of Kyrgyz Republic—9 million hectares—was classified as pasture. Eight percent was arable, 5 percent was forest, and 33 percent was classified as unused or unusable (mainly mountain) land (table 3.1).

¹ The chapter is based primarily on official statistics, with results of LTC farm-level research used to fill data gaps. As noted in chapter 1, official documentation of farm reorganization is not adequate to allow easy assessment of the pace of change, nationally or regionally. Reasons for the data problems that the KR has inadvertently created are discussed in chapter 4. We have tried to be careful in our descriptions of enterprise types and our use of various official typologies. Others contemplating use of official land reform data are warned that the material is initially confusing. Faulty conclusions are easily drawn from incorrect inferences about what one or another agency means at any given time by concepts such as **peasant farm**, **association of peasant farms**, or **reorganized enterprise**. Despite these difficulties, we wish to show that it is possible to draw useful, judicious interpretations from the official data.

Land category (thousands of ha. in:)	1 January 1991	1 January 1995
Annual crops	1,295.7	1,297.7
Perennial crops	44.7	45.7
Fallow	11.9	19.2
Hayfields	207.7	167.0
Pasture	8,844.1	9,063.3
Land around houses	97.6	151.0
Collective gardens	4.4	4.4
Collective orchards	2.0	8.2
Land under amelioration and fertility restoration	6.7	13.6
Forest	1,123.3	1,042.0
Scrub and brush area ^a	106.5	454.8
Swamps	8.6	6.2
Land covered by water bodies ^b	867.3	874.7
Land under roads and livestock paths	121.9	113.2
Streets, public squares, and yards	49.6	62.3
Land under public structures	27.2	28.9
Destroyed land ^c	2.0	2.7
Other ^d	7,173.7	6,639.5
Total area	19,994.9	19,994.4
<p>a. Includes area not considered part of State Forest Fund, shelterbelts, other protective vegetation, other protected areas, and scrub and brush growing on land designated as agricultural land.</p> <p>b. Includes land under rivers, streams, seas, lakes, reservoirs, ponds, artificial water bodies, canals, collectors, and drainage arteries.</p> <p>c. Includes land under exploration for "useful materials," under <i>torforazrabotkax</i>, and under construction sites and other such structures.</p> <p>d. Includes sands, <i>ovragov</i>, glaciers, other unused land, cliffs, and <i>osiypi</i>.</p>		
SOURCE: State Inspectorate on Land Resources and Engineering		

Major food- and feed-grains, in order of sown area, were spring barley, winter wheat, maize, winter barley, and spring wheat. Nearly all grain production was irrigated. Other important annual crops included potatoes, vegetables, and sugar beets. Hayfields constituted approximately 15 percent of cropland. In the more temperate southwest, industrial and horticultural crops dominated production, especially cotton and tobacco, but also fruits, vegetables, and nuts (table 3.2).

TABLE 3.2 Sown area in the KR, 1990–1994 (000 ha)

Crop	1990	1991	1992	1993	1994
Grains, total	537.4	556.5	576.5	623.8	585.6
of which: <i>wheat</i>	193.6	193.6	248.4	338.3	333.1
<i>barley</i>	266.4	290.1	263.5	235.5	206.7
<i>maize</i>	65.7	62.3	54.7	40.7	36.6
<i>rice</i>	1.2	1.8	1.9	2.5	3.0
Cotton fiber	29.7	25.9	21.5	20.3	26.5
Sugarbeets	0.1	0.8	6.3	11.7	9.8
Tobacco	19.1	19.9	20.8	22.2	18.9
Potatoes	25.2	22.5	27.2	26.6	34.2
Vegetables	20.7	19.5	22.2	14.9	22.4
Berries	47.7	46.6	46.6	44.1	48.5
Grapes	9.2	8.9	8.4	8.1	8.4
Feed crops, total	641.4	620	575.6	519.2	515.8
of which: <i>hay</i>	188.5	185.6	188.6	183.8	200.0
<i>green fodder</i>	156.5	159.8	150.9	135.5	117.5
Total for major crops	1,330.5	1,320.6	1,305.1	1,290.9	1,270.1

SOURCE: State Statistical Committee

B. FARM TYPES

During the Soviet period, almost all cropland and pasture was held by state and collective farms.² In 1990, Soviet Kyrgyz Republic's 263 state farms contained 8.1 million hectares of the republic's 19.9 million hectare total (table 3.3). The average state farm comprised 30,798 hectares, including pasture.³ Collective farms numbered 179 in 1990 and covered 7.2 million hectares (table 3.3). Their average size was 40,223 hectares, including pasture.⁴

² Other types of state agricultural enterprises—research farms, experimental farms, subsidiary farms of industrial enterprises, and others—accounted for just 4 percent of agricultural land.

³ Eighty-five percent of all agricultural land in Kyrgyz Republic was classified as pasture.

⁴ State farms are best thought of as “factories in the field,” or the rural equivalents of urban factories. They are owned and managed by the state; workers are salaried and paid from the state budget. Collective farms traditionally were considered profit-sharing cooperatives, with workers' pay dependent on farm profitability (as defined in Soviet terms). However, by the 1990s, collective farm workers were given salaries, and the differences between state and collective farms had all but disappeared.

TABLE 3.3 Distribution of land resources in the KR, 1 January 1991

	No. of enterprises	Total area (ha)
Collective farms	179	7,183,800
Agricultural cooperatives	0	0
Interfarm agricultural enterprises	7	2,600
State agricultural enterprises	1,134	8,838,700
-- <i>Sovkhozes</i>	263	8,145,500
-- State agricultural research institutes	57	522,400
-- Subsidiary enterprises	743	83,100
-- Other enterprises	71	87,600
Other agricultural enterprises	0	0
Peasant farms	8	1,200
Land excess	30	1,440,000
Forestry enterprises	61	1,072,300
Urban land/rural settlements	75	58,500
Land of industry, transport, defense, and communications		
	3,740	904,100
Nature protection, recreation, and historical/cultural		
	147	40,700
Land use under hydro-engineering	777	97,000
Totals ^a		
Land used by the KR	6,158	19,638,900
Land used outside the boundaries of the KR		
	114	870,500
Land used in the KR by other countries		
	4	1,226,200
Land used within the boundaries of the KR		
	6,048	19,994,500
^a Figures may not add due to rounding		
<p>Interfarm Enterprises: Entities that performed services for a group of state or collective farms in a single region. For example, livestock fattening stations in each <i>rayon</i> were considered interfarm enterprises. Their function was to collect young livestock from each farm and to transport them via rail to a feed station where they were kept and fattened for 1-2 months until the buyer came to collect them. Seed stations, another example of interfarm enterprises, would provide seeds to all farmers in the region.</p> <p>State Agricultural Enterprises: State farms (<i>sovkhozes</i>), training farms and research institutes, subsidiary farms of industrial enterprises, specialized farms such as elite seed farms, breeding farms and experimental farms of research institutes.</p> <p>Other Agricultural Enterprises: Includes joint-stock companies.</p> <p>Peasant Farms: Includes single family farms as well as associations of peasant farms.</p> <p>Excess Land: Land that is difficult or impossible to use, for example, high steep pasture, glaciers, cliffs, and other areas that are difficult to access.</p>		
SOURCE: State Inspectorate on Land Resources and Engineering		

C. RURAL POPULATION

A very large share of Kyrgyz Republic's 4.5 million people—63 percent—live in rural areas. The rural population is unevenly distributed among regions. The southern part of the country, Djalal-Abad and Osh *oblasts*, has a considerably higher population density than the rest of the

republic, mainly for historical and agroecological reasons.⁵ Table 3.4 shows cultivated land per person and irrigated land per person in each of Kyrgyz Republic's six *oblasts*. The land/population ratio is three to four times higher in Issyk-Kul, Naryn, Talas, and Chui *oblasts* than in Djalal-Abad and Osh. In other words, Djalal-Abad and Osh have three to four times more people per farmed hectare than the rest of the country.

TABLE 3.4 Land resources and rural population by *oblast*, 1 January 1995

Oblast	Total land (000 ha)	Cultivated land ^a (000 ha)	Irrigated land ^b (000 ha)	Rural population ^c (000 persons)	Cultivated per person (ha)	Irrigated per person (ha)
Djalal-Abad	2,791.9	159.1	96.7	820.5	0.19	0.12
Issyk-Kul	4,390.7	187.8	136.8	418.5	0.45	0.33
Naryn	4,411.8	133.0	110.9	261.7	0.51	0.42
Osh	4,208.1	259.2	129.2	1,408.5	0.18	0.09
Talas	1,443.9	120.0	88.9	202.4	0.59	0.44
Chui	2,428.8	446.9	273.1	745.5	0.60	0.37
Kyrgyz Republic	19,674.8	1,306.0	835.6	3857.1	0.34	0.22
a. Land in annual crops						
b. Irrigated land in annual crops						
c. Residents of agricultural enterprises						
SOURCE: State Inspectorate on Land Resources and Engineering						

Under the Soviet system, most rural residents lived in villages on the state and collective farms. Nucleated settlement was the norm: the typical state or collective farm contained one to three distinct villages, all of whose residents were numbered among the farm inhabitants. According to research results reported in later chapters, state and collective farms supported an average of over 6,500 residents before land reform, of which an average of 2,500 were working-age adults. Most of the rest were children and pensioners.

Not all working-age farm residents were employees of the farm. On average, half the resident working-age adults were employed off the farm, typically in nearby industrial enterprises or cities.⁶ Moreover, many farm employees were engaged in activities other than agricultural production. According to research results presented in later chapters, 19 percent of the working-age population employed on state and collective farms worked in the farm

⁵ In addition to their more temperate climate, Djalal-Abad and Osh are adjacent to the Fergana Valley, which, unlike the rest of Kyrgyz Republic, had a long history of sedentary agriculture before the arrival of Russians in the middle of the nineteenth century.

⁶ This figure derives from LTC research results presented in chapter 5. The average is skewed somewhat by the very large percentage of off-farm workers on a few sample farms near cities.

administration or in the social sphere, as farm managers, cooks, shopkeepers, doctors, teachers, and the like.⁷

III. PROCESS OF FARM RESTRUCTURING, 1991–1995

Chapter 2 details the legal history of farm restructuring from 1991 to 1995; however, since this assessment of the impacts of legal change on the agrarian structure of the country depends on a clear idea of the meaning of various types of farm enterprises as defined in the evolving law, a brief review of farm types is called for. Particular attention is given to categories employed during the 1991–1993 period. Subsequent changes will be addressed in turn.

A. FARM TYPES, 1991–1993

1. Peasant farms

Peasant farms were defined during the early reform period as private entities. They could be either single or multiple-family farms. Early decrees, in 1991, led to the creation of voluntarily-formed peasant farms on a fraction of the territory of many state and collective farms. However, by late 1992, the opportunity seemed to be open to convert entire state or collective farms, or large parts of them, into peasant farms. Although legally possible, this did not happen. A small number of families on state and collective farms targeted for restructuring during the 1991–1993 period opted to take private parcels and farm independently, but nowhere during this period was an entire state or collective farm divided entirely (or even largely) into fully independent peasant enterprises.

It is important to note, however, that on some farms during this period, certain families (sometimes all families) were allocated paper land shares which **theoretically** corresponded to individual plots of land. Rarely under these circumstances were these paper land shares tied to specific land parcels. Even where they were, families rarely worked their own land. After obtaining their shares, families were registered as peasant farms, but in most cases the entire enterprise continued to be run as before. Peasant farms of this type flouted the legal definition of a peasant farm as stipulated in the February and April 1991 laws, but no apparent attempt was made to enforce adherence to those laws.

In summary, the peasant farm category during 1991–1993 comprised a small number of voluntarily formed, private enterprises as well as an undetermined number of prescriptively created, registered peasant farms that actually were legal fictions.

⁷ Kyrgyz Republic differs from other former Soviet republics such as Russia in that on the eve of restructuring, schools and medical facilities on the territories of farms were financed by the *rayon* administration rather than by the farm itself.

2. Associations of peasant farms

By late 1992, provisions allowed for the formation of associations of peasant farms. These would be voluntary unions of farmers possessing geographically demarcated plots, with management democratically determined.⁸ This category seems to have been devised, at least in part, in pragmatic acknowledgment of the fact that registered peasant farmers on prescriptively reorganized state and collective farms often were working cooperatively, typically under old management structures. Most of the associations of peasant farms formed during 1992 and 1993 were very large. They were, essentially, the former state or collective farm, renamed. Others were medium-scale enterprises, comprising 1,000 or so hectares, but even here the old farm-management structure typically was kept intact, in practice though not in name, with multiple medium-scale associations of peasant farms functioning as a single large-scale unit, managed by the old guard. Fully devolved, medium- or small-scale associations of peasant farms were rare.

3. Joint-stock companies

Joint-stock companies were to be corporate entities, with assets of the former state or collective farm held by the company, shares in the company held by residents, and management determined by the shareholders. This form was commonly used on farms privatized by the State Property Committee during 1991 and 1992. One reason this option often was chosen initially is that it was an easy matter to rename a state or collective farm a joint-stock company. Little management restructuring was required. In fact, joint-stock companies almost always used the management shell of the former state or collective farm. There sometimes was election of officers and management. Even when this step was carried out, it was typically a pro forma endorsement of former management structures.

4. Agricultural production cooperatives

Cooperatives implied a form of collective management over large parcels, typically the entire territory of the former state or collective farm. Occasionally when the cooperative form was chosen, the former farm was divided into two or three cooperatives, still very large.⁹ In a cooperative, shares in farm assets were to be assigned to farm residents, but (as in a joint-stock company) the farm would not be physically divided into family parcels. The basis of the new enterprise was the voluntary pooling of shares and cooperative production using these assets. Members theoretically would be responsible for management, but management procedures for cooperatives were unspecified and ambiguous. As was the case in associations of peasant farms and joint-stock companies, management in practice tended to rest with officials of the former state or collective farm. The conditions and responsibilities of rank-and-file members tended to change very little.

⁸ Geographic demarcation of separate family plots often was a fiction, however. On this general subject see D. Van Atta (1994, p. 177).

⁹ This division was commonly done along village lines or along the boundaries of former farm enterprise as they existed prior to Khrushchev's agglomeration program of the 1960s.

To a large degree all types of restructured enterprises retained effective access to the state supply and marketing apparatus during the 1991–1993 period, even though, in theory, input provisioning and marketing were now the responsibility of the new enterprise, not the state. Likewise, while the debt of the former farm was in principle transferred to the new joint-stock company, association of peasant farms, or cooperative, it is likely that rank-and-file members, accustomed to state subsidies, assumed that they would never be held accountable for those debts.¹⁰

As may be inferred from the descriptions offered above, there was, in practical terms, little difference in the organizational structure and management of cooperatives, joint-stock companies, and associations of peasant farms. All three types resembled in their management the centralized form of the state and collective farms. Managers frequently reregistered farms under new names (changing, for example, from an association of peasant farms to a joint-stock company), not after any on-farm reorganization but because of some perceived advantage following an announced government shift in state policy toward one or another type (a practice that continues in 1995).

B. AGRARIAN STRUCTURE FOLLOWING 1991–1993 REFORMS

Table 3.5 shows, by *oblast* and for the country as a whole, the percentage of arable land held by various types of enterprises, as of 1 January 1993.¹¹ Eight percent of arable land in Kyrgyz Republic came under the broad designation peasant farms.¹² This figure seems to suggest considerable progress in farm restructuring during 1991 and 1992, especially given that just one year earlier (1 January 1992, no table) only 0.9 percent of arable land was controlled by peasant farms. Furthermore, as table 3.6 shows, the average peasant farm was fairly small, containing just 18 arable hectares. Additional data advise interpretive caution, however. If peasant farm-size calculations are based on total land area held by peasant enterprises, including pasture, the area under peasant farms as of 1 January 1993 was 1.77 million hectares, yielding a very high average farm size of 294 hectares. Furthermore, in some *oblasts* the average size of peasant farms calculated this way was extremely high: notably, 7,638 hectares in Djalal-Abad, and 749 hectares in Naryn. The meaning of these additional data is clear: included in the peasant farm category were a certain number of associations of peasant farms, which, as noted, were peasant farms in name only.¹³ While the number of associations of

¹⁰ Research results reported in chapter 5 suggest that a few cooperatives formed during this period were actually smaller-scale, cooperatively managed enterprises. This shows that real restructuring was possible where there was enthusiasm for it. It also points to the analytical conundrum faced by officials and outsiders trying to gauge the pace of reform: a registered cooperative might or might not have been effectively restructured, and official statistics provide no way of telling the difference.

¹¹ Total (rather than arable) landholdings also would be a reasonable comparative measure for this date, but during 1994 and 1995, pasture was no longer subject to restructuring; it remained the property of the state. For consistency among tables 3.5, 3.8 (1 January 1994), and 3.10 (1 January 1995), arable was deemed the preferable measure.

¹² Note that the State Inspectorate on Land Resources and Engineering did not, at this time, keep separate figures for peasant farms and associations of peasant farms. All were recorded in the peasant-farm category.

¹³ Large pasture holdings in the peasant-farm category are almost entirely attributable to the inclusion in the category of associations of peasant farms. Few private farmers were given extensive pasture. Associations of

peasant farms may not have been very high, their inclusion inflated landholdings in the peasant farm category (see especially Djalal-Abad). Without them, the data in table 3.6 would show smaller peasant farms (as apparently was the norm in Chui), but the percentage of land in the peasant-farm category would be considerably less than the impressive 8 percent shown in table 3.5.

Table 3.5 Percent of arable land held by various types of enterprise, 1 January 1993

	Djalal-Abad	Issyk-Kul	Naryn	Osh	Talas	Chui	Kyrgyz Republic
Total arable land held by all agricultural enterprises (ha):	155,000	179,300	156,300	261,300	120,600	411,700	1,284,300
Percent of total held by:							
-- Associations of peasant farms, peasant farms, and private farms	12	6	21	3	6	7	8
-- Cooperatives	3	10	17	22	5	15	13
-- Collective farms	40	32	16	29	47	33	32
-- State farms	43	39	34	42	34	32	37
-- Other ^a	1	13	12	4	9	14	9
^a Includes state agricultural research institutes, subsidiary agricultural enterprises, other state agricultural enterprises, and joint-stock companies.							
Totals may not add to 100% due to rounding.							
SOURCE: State Inspectorate on Land Resources and Engineering							

TABLE 3.6 Number and mean arable land of peasant farms by oblast, 1 January 1993

Oblast	Arable land under peasant farms (ha)	No. of peasant farms	Mean arable of peasant farms (ha)
Djalal-Abad	18,000	78	231
Issyk-Kul	10,000	457	22
Naryn	33,200	983	34
Osh	8,900	261	34
Talas	6,900	177	40
Chui	29,900	4,070	7
Kyrgyz Republic	106,900	6,026	18
SOURCE: State Inspectorate on Land Resources and Engineering			

peasant farms created during this round of restructuring probably were especially pasture rich. The focus of prescriptive restructuring was on unprofitable and less profitable state and collective farms; these tended to be enterprises that did not contain rich cropland and specialized instead on grazing. This interpretation also helps explain the small average size of peasant farms in Chui oblast, Kyrgyz Republic's breadbasket. Few if any associations of peasant farms were created in this well-off region; the peasant farms that did exist appear to have been small, voluntary private farms.

Table 3.5 shows that 13 percent of arable land as of 1 January 1993 was in cooperatives. The figure one year earlier was 1 percent. As noted, cooperatives could be small-, medium-, or large-scale farms, but overall the tendency during this period was for cooperatives to be the functional equivalent of former state or collective farms. This is partly confirmed by figures on the size of cooperatives (table 3.7). Massive cooperatives, as seen in Issyk-Kul and Naryn, represent the entire land area, including pasture, of former state and collective farms. Even where cooperatives were comparatively small, as in Talas, they probably did not represent significant devolution from large-scale forms of management. (Calculating only arable land, the Kyrgyz Republic mean was 752 hectares.¹⁴)

TABLE 3.7 Number and mean size of cooperatives by oblast, 1 January 1993

Oblast	Total area (ha)	No. of cooperatives	Mean total size (ha)
Djalal-Abad	39,500	7	5,643
Issyk-Kul	347,200	2	173,600
Naryn	1,261,900	35	35,054
Osh	1,041,000	124	8,395
Talas	38,300	14	2,736
Chui	254,200	32	7,944
Kyrgyz Republic ^a	2,982,100	228	13,079

^a Kyrgyz Republic figures do not sum in the original data

SOURCE: State Inspectorate on Land Resources and Engineering

As for joint-stock companies and other nonstate, noncollective farms, table 3.5 shows that they held a total of 9 percent of arable land on 1 January 1993. Joint-stock companies accounted for about half of that.

C. AGRARIAN STRUCTURE FOLLOWING LEGAL STAGNATION IN 1993

Figures on enterprise types as of 1 January 1994 are evidence of the limited progress made during the first three years of reform (table 3.8). Comparison of tables 3.8 and 3.5 shows that the pace of change was especially slow during 1993. Thirteen percent of Kyrgyz Republic's arable land was in the peasant farm category on 1 January 1994.¹⁵ However, much of this land was controlled by large associations of peasant farms, which typically were simply renamed state and collective farms. The MAF by this date determined that associations of peasant farms numbered 123. Without figures on their landholdings, it is impossible to calculate the

¹⁴ For Djalal-Abad, the arable mean was 571; Issyk-Kul, 8,850; Naryn, 771; Osh, 462; Talas, 500; and Chui, 1,868. Total landholdings, rather than just arable, are presented in the table because cooperatives during this period normally encompassed all land of the former enterprise, including pasture.

¹⁵ The average arable holding of farms in the **peasant farm** class remained 18 hectares [no table].

percentage of the peasant-farm category they comprised, but if we assume that the average association of peasant farms controlled 800 arable hectares (which was the figure one year later), then associations of peasant farms held 57 percent of arable land in the peasant-farm class, and the percentage of Kyrgyz Republic's total arable held by fully devolved peasant and private farms was 6 percent rather than 13 percent.¹⁶

TABLE 3.8 Percent of arable land held by various types of enterprise, 1 January 1994

	Djalal-Abad	Issyk-Kul	Naryn	Osh	Talas	Chui	Kyrgyz Republic
Total arable land held by all agricultural enterprises (ha):	155,800	190,300	157,800	258,300	120,100	416,000	1,298,300
Percent of total held by:							
-- Associations of peasant farms, peasant farms, and private farms	21	13	33	4	8	10	13
-- Cooperatives	3	17	3	15	4	7	9
-- Collective farms	37	31	22	38	45	36	35
-- State farms	36	28	30	35	35	26	31
-- Other ^a	3	11	13	9	7	20	12
^a Includes state agricultural research institutes, subsidiary agricultural enterprises, other state agricultural enterprises, and joint-stock companies.							
Totals may not add to 100% due to rounding.							
SOURCE: State Inspectorate on Land Resources and Engineering							

Meanwhile, the cooperative class had shrunk since 1993, to 9 percent of arable land, apparently because of shifts into associations of peasant farms and other enterprise types (see especially figures for Naryn). There were still 174 registered state farms and 206 registered collective farms as of 1 January 1994 (State Inspectorate on Land Resources and Engineering). Altogether they continued to control a total of 66 percent of the arable land in Kyrgyz Republic (down just 3 percent from one year earlier). This situation, especially the lack of formal mechanisms for systematically converting state and collective farms into small-scale farms under new management, led the government to halt the reform effort temporarily in 1993, realizing that changes in the process were needed.

D. RENEWAL OF REFORMS AND NEW DEFINITIONS OF ENTERPRISE TYPES, 1994–1995

When the farm restructuring program resumed in early 1994, responsibility for implementation was transferred from the State Property Committee to the MAF. As noted in chapter 2, the Presidential Decree of 22 February 1994, along with several subsequent rules and orders issued

¹⁶ Following this logic, the average arable holding of a fully devolved peasant or private farm as of this date would be 8 hectares.

by the ministry, focused on liquidating all state, collective, and specialized farms and replacing them with smaller-scale agricultural enterprises. Under the new program, most existing large-scale agricultural enterprises were to distribute shares of their land to all rural residents and nonland assets to their workers, who would then pool their land and property shares to form new, smaller (10–150 hectare) enterprises. (On farm-size categories and limits, see chapter 2.)

The goal of the MAF was to liquidate most state and collective farms by June 1995, including the specialized seed and breed farms previously exempt from the government's restructuring program. In their place would be single-family individual farms (a legacy of the first stage of reform, hitherto called peasant farms), peasant farm enterprises (multi-family farms), and cooperatives, associations of peasant farms, and joint-stock companies, all larger forms of reorganized farms sanctioned by 1991 and 1992 decrees and supported as well by the decrees of 1994.¹⁷

IV. AGRARIAN STRUCTURE, JULY 1995

Table 3.9 shows the distribution of land among various enterprise types as of 1 January 1995. At that time, there were still 138 registered collective farms and 137 state farms. The number of cooperatives was 198, representing a decline from 206 one year earlier, and 228 two years earlier.¹⁸ The number of peasant farms had risen to 13,608. One year earlier the figure had been 9,764, and two years earlier it had been 6,026.¹⁹

The rise in the number of peasant farms during 1993 and 1994 may be taken as a sign of significant progress in farm restructuring because growth in this category, especially during 1994, was due almost entirely to the formation of multi-family peasant farms created as households pooled their land and property shares to create small enterprises to meet minimum

¹⁷ This new farm typology, introduced in January 1995, defined farm categories as follows: **Individual Farm**—single-family farm; **Peasant Farm Enterprise**—a multi-family entity with landholdings of up to 30 hectares in intensive and semi-intensive zones and up to 50 hectares in other areas; **Agricultural Cooperative**—an entity with landholdings of 30–100 hectares in intensive and semi-intensive zones or 50–150 hectares in other areas; **Collective Farm**—an entity operating under collective (nonstate) ownership, with landholdings of more than 100 hectares in intensive and semi-intensive zones or more than 150 hectares in other areas; **State Farm**—a state-owned entity with landholdings of more than 100 hectares in intensive and semi-intensive zones, or more than 150 hectares in other areas. Considerable re-registration will be required under this typology. For instance, a 1,500-hectare agricultural cooperative will be reregistered as a collective; a multi-family peasant farm with 75 hectares will now be recorded as a cooperative.

¹⁸ This decline is not especially meaningful. Throughout this process there has been considerable shifting about in the self-definition of new enterprises; a collective farm might become a cooperative, then an association of peasant farms, then a joint-stock company as members or management perceive a political advantage in a new label.

¹⁹ The high number of hectares recorded under the peasant farm category results from the inclusion of associations of peasant farms, which held pasture, and from the assignment to smaller-scale private and peasant farms, by statisticians, of a share of the pasture of the enterprise out of which they were created. The latter is a statistical fiction, carried out so the numbers would sum correctly.

farm-size requirements.²⁰ Of the 13,799 peasant farms recorded in a separate register by the State Inspectorate (compare with table 3.9), 13,346 of them were private or small-scale peasant farms, and just 191 were associations of peasant farms.²¹

TABLE 3.9 Distribution of land resources in the KR, 1 January 1995

	No. of enterprises	Total area held by enterprises (ha)
All collective farms	138	3,274,600
Agricultural cooperatives	198	1,869,700
Interfarm agricultural enterprises	20	578,800
State agricultural enterprises	985	4,037,800
-- <i>Sovkhozes</i>	137	3,272,500
-- State agricultural research institutes	83	448,300
-- Subsidiary enterprises	677	225,300
-- Other enterprises	83	103,500
Other agricultural enterprises	194	692,500
Peasant farms	13,608	4,789,200
Land excess	-- ^b	2,209,600
Forestry enterprises	-- ^b	1,068,500
Urban land/rural settlements	-- ^b	101,300
Land of industry, transport, defense and communications	-- ^b	878,100
Nature protection, recreation, and historical/cultural	-- ^b	81,300
Land use under hydro-engineering	-- ^b	93,800
Totals ^a		
Land used by the KR	-- ^b	19,675,100
Land used outside administrative boundaries of the KR	-- ^b	630,900
Land used in the KR by other countries	-- ^b	950,300
Land used within administrative boundaries of the KR	-- ^b	19,994,500
^a Figures may not add due to rounding		
^b No data available		
Interfarm Enterprises: Entities which performed services for a group of state or collective farms in a single region. For example, livestock fattening stations in each <i>rayon</i> were considered interfarm enterprises. Their function was to collect young livestock from each farm and to transport them via rail to a feed station where they were kept and fattened for 1-2 months until the buyer came to collect them. Seed stations, another example of interfarm enterprises, would provide seeds to all farmers in the region.		
State Agricultural Enterprises: State farms (<i>sovkhozes</i>), training farms and research institutes, subsidiary farms of industrial enterprises, specialized farms such as elite seed farms, breeding farms, and experimental farms of research institutes.		
Other Agricultural Enterprises: Includes joint-stock companies.		
Peasant Farms: Includes single family farms as well as associations of peasant farms.		
Excess Land: Land which is difficult or impossible to use, for example, high steep pasture, glaciers, cliffs, and other areas that are difficult to access.		
SOURCE: State Inspectorate on Land Resources and Engineering		

²⁰ In 1994, the Ministry of Agriculture set a minimum farm size limit of 10 hectares. for all commodity-producing farms in Kyrgyz Republic.

²¹ By 1994, the State Inspectorate had begun recording private and peasant farms in one category and associations of peasant farms in another. There were 1,287 private and small-scale peasant farms and 36 associations of peasant farms in Djalal-Abad; 973 and 20 in Issyk-Kul; 1,765 and 81 in Naryn; 1,086 and 0 in Osh; 623 and 35 in Talas; and 6,892 and 19 in Chui.

Furthermore, as table 3.10 shows, private farms and small-scale peasant farms now comprised, together, 12 percent of arable land in the Kyrgyz Republic (associations of peasant farms were by this time recorded separately). If estimates for private and peasant farms for the previous year are correct, 12 percent represents a doubling in the arable landholdings of small-scale farms in one year.

TABLE 3.10 Percent of arable land held by various types of enterprise, 1 January 1995

	Djalal-Abad	Issyk-Kul	Naryn	Osh	Talas	Chui	Kyrgyz Republic
Total arable land held by all agricultural enterprises (ha):	157,700	187,800	131,900	257,500	119,600	447,700	1,302,200
Percent of total held by:							
-- Peasant farms and private farms	21	4	24	19	5	7	12
-- Associations of peasant farms	14	14	31	0	9	12	12
-- Cooperatives	6	24	7	10	12	7	11
-- Collective farms	11	28	7	30	39	26	25
-- State farms	10	22	17	28	28	26	23
-- Other ^a	38	8	14	13	7	21	17
^a Includes state agricultural research institutes, subsidiary agricultural enterprises, other state agricultural enterprises, and joint-stock companies.							
Totals may not add to 100% due to rounding.							
SOURCE: State Inspectorate on Land Resources and Engineering							

The State Committee on Land Resources and Engineering contends that it only records enterprises once they have taken physical possession of an identifiable parcel of land, so these data appear to represent a fair picture of regional variation in progress toward creating small-scale enterprises. Particular progress appears to have been made in Osh. One year earlier just 4 percent of arable land in Osh was in the peasant-farm class (and this included any associations of peasant farms); by 1 January 1995, the figure for small-scale private and peasant farms was 19 percent.²² More generally, Djalal-Abad, Naryn, and Osh showed a significantly higher percentage of arable land in small-scale enterprises than Issyk-Kul, Talas, and Chui.

State and collective farms together still controlled 48 percent of arable land in the Kyrgyz Republic on 1 January 1995, with figures highest in Talas (67 percent), Osh (58 percent), Chui (52 percent), and Issyk-Kul (50 percent). Associations of peasant farms held 12 percent of Kyrgyz Republic's arable, with a high of 31 percent in Naryn. The republic-wide figure for cooperatives was 11 percent, with Issyk-Kul highest at 24 percent. The high number of "other" enterprises in Djalal-Abad appears to reflect conversion to joint-stock companies.

Table 3.11 shows the average size of the arable holdings of the different enterprise types as of 1 January 1995. In some *oblasts*, notably Osh and Djalal-Abad, private and peasant farms

²² Note that by 1994 there was an *oblast*-wide prohibition against associations of peasant farms in Osh.

remained relatively large. Since individual land shares in the south are generally quite small, many families would have had to pool land shares to achieve the farm sizes reported.²³ Thus, it is likely that such farms consist of many families and support hundreds of individuals.²⁴ Elsewhere, notably in Chui, Issyk-Kul, and Talas, private and peasant farms—at least their arable holdings—were quite small. All other enterprise types—associations of peasant farms, cooperatives, collective farms, and state farms—still showed large arable holdings throughout the country.

TABLE 3.11 Mean arable landholdings of various enterprise types, 1 January 1995 (ha)

	Djalal- Abad	Issyk- Kul	Naryn	Osh	Talas	Chui	Kyrgyz Republic
Peasant farms and private farms	26	8	18	27	9	5	12
Associations of peasant farms	628	1,330	509	-	309	2,714	800
Cooperatives	443	2,295	440	448	763	550	699
Collective farms	1,989	3,729	1,860	1,424	2,747	3,053	1,790
State farms	1,250	2,382	1,833	2,077	3,700	2,269	2,201
Other ^a	355	127	433	143	130	354	240
^a Includes state agricultural research institutes, subsidiary agricultural enterprises, other state agricultural enterprises, and joint-stock companies.							
SOURCE: State Inspectorate on Land Resources and Engineering							

Given that the new farm typology introduced by the Ministry of Agriculture and State Statistical Committee is likely to become the standard in coming years, it is useful to consider statistics for 1 January 1995 compiled in the new manner by the MAF (table 3.12). The ministry itself is skeptical of the veracity of the numbers, because the field staff that compiled the data often were unsure how to classify farms and lacked clear guidelines. For instance, all small-scale farms in Chui were classified as peasant farms, though it is likely that at least a few, if not many, of them are single-family entities that should have been recorded under the individual farm category.

²³ The high population density in the southern *oblasts* resulted in small individual land shares in comparison with northern *oblasts*. Household land shares in the south are commonly less than 1 hectare, whereas in Chui and Issyk Kul, individual land shares are as high as 1.5 hectares.

²⁴ On this subject, see chapter 5. LTC research during the first half of 1995 suggests that many of the more recently formed peasant enterprises in Osh are considerably smaller; in fact, many disregard the legal 10-hectare minimum.

TABLE 3.12 Number and type of agricultural enterprises (new typology), 1 January 1995

	Djalal- Abad	Issyk-Kul	Naryn	Osh	Talas	Chui	Kyrgyz Republic
Individual Farms	490	63	7,990	0	1,534	0	10,077
Peasant Farms	1,427	225	1,324	2,014	0	7,002	11,989
Agricultural Cooperatives	40	19	18	43	21	40	181
Collective Enterprises	40	2	0	10	0	14	66
State Enterprises	7	1	12	0	17	20	57

SOURCE: MAF

During early 1995, the Republican Center for Land and Agrarian Reform undertook a vigorous effort aimed at dismantling all state and collective farms by the middle of the year. By 1 April, the State Statistical Committee and the State Institute on Land Resources and Engineering counted 86 remaining collective farms and 81 remaining state farms, a drop from 139 and 137, respectively, just three months earlier. The number of small-scale private and peasant farms had risen from 13,346 on 1 January to 24,152. Interviews in rural areas during this period support the view that this was, in fact, a period of rapid change, with land shares and physical parcels of former large-scale enterprises allocated to residents and a great many small-scale peasant farms formed in time for planting, especially in the southwest. Elsewhere, notably in Chui and in scattered *rayons* throughout the country (including some *rayons* in the southwest), changes were more cosmetic, and the 1995 spring planting season saw production still organized on a large scale. In fact, it must be assumed that the clear majority of Kyrgyz Republic's farmers, probably more than 75 percent, still were organized in large-scale enterprises during the 1995 crop year. That percentage is likely to decline considerably in 1996 as the 1995 recipients of land parcels make arrangements for the creation of small farms and smaller-scale production.

By July, unofficial assessments in the MAF held that fewer than 100 state and collective farms remained in operation. Disappointment over the pace of reform continued in the ministry, however, even during this active period, based largely on the conviction that some officials—including certain *akims* and the directors of many former large-scale enterprises—were at best reluctant reformers. While state and collective farms were being disbanded and, in certain regions such as Osh, the number of small-scale enterprises was growing rapidly, many of the intermediate enterprises—cooperatives, associations of peasant farms, and joint-stock companies—were judged as being no different from the former state and collective farms. Large enterprises, or their shells, still held well over two-thirds of Kyrgyz Republic's arable land in mid-1995, and it was hard to imagine some of them disappearing soon. The challenge ahead was to extend to these enterprises the devolutionary principles that had been adopted on a much smaller subset of farms, but the way was not clear. This concern in the ministry, and elsewhere in government, was not just ideological: whatever uncertainties the small-farm sector faces, the viability of vestigial centralized enterprises without the state support structures that previously sustained them is even more doubtful.

V. FARM LABOR AND OUTPUT DURING RESTRUCTURING PERIOD

It is too early to judge the impact of land reform and farm restructuring on the demographic profile of the rural Kyrgyz Republic and the productivity of the agricultural sector. The greatest changes are still ahead. As for changes that have occurred, it is not yet possible to determine which of them can be attributed to land reform and which can be attributed to the general crisis of Kyrgyz Republic's macroeconomic transformation. A few pointers are available, however.

A. FARM LABOR

The capacity of restructured farms to absorb at least a large part of the rural labor force is a major unanswered question. It cannot be completely answered now, but table 3.13 offers certain hints. It shows that, as of 1 January 1994, small-scale peasant and private farms employed an average of 4.6 workers. In section III, it was estimated that on that date the average small-scale peasant or private farm controlled 6 hectares of arable land. The data are rough, but these figures yield a ratio of 0.76 arable hectares per worker on small-scale farms. Table 3.13 records an average of 1,120 workers on state and collective farms. Given that the average state or collective farm controlled 2,249 arable hectares on 1 January 1994, the estimated number of arable hectares per worker on state farms and collectives calculates out at just over two. Table 3.13 also gives figures for other large-scale enterprises, notably cooperatives and associations of peasant farms. If associations of peasant farms had an average of 800 hectares of arable land on 1 January 1994 (which they did one year later, see table 3.11), their ratio comes to 1.7 hectare per worker. The ratio for agricultural cooperatives (with an average of 752 arable hectares on 1 January 1994) is anomalously low: less than 0.2 hectare per worker.²⁵ Nonetheless, and despite the fragility of the data, we see evidence in these numbers that smaller-scale enterprises require or permit fewer workers per hectare; as farm restructuring proceeds, the trend is likely to be toward a smaller work force in agriculture.²⁶

²⁵ We have no ready explanation for this anomaly: it may be statistical error, or it may reflect the recording elsewhere of service and administration workers previously attached to the state farms and collectives from which cooperatives were formed.

²⁶ As noted in section I, state and collective farms employed many nonagricultural workers, some of whom certainly will be absorbed in service and administrative capacities henceforth defined as outside the sphere of agriculture.

TABLE 3.13 Average number of workers employed in various enterprise types, 1 January 1994

	Djalal- Abad	Issyk- Kul	Naryn	Osh	Talas	Chui	Kyrgyz Republic
Peasant and private farms	6.3	3.2	5.2	8.3	3.9	3.5	4.6
Associations of peasant farms	51	933	997	--- ^a	172	988	475
Cooperatives	35	50	60	276	87	55	121
State and collective farms	--- ^a	--- ^a	--- ^a	--- ^a	--- ^a	--- ^a	1,120
Small state enterprises	25	--- ^a	--- ^a	--- ^a	3.7	25	24
Joint-stock companies ^a	1,500	--- ^a	--- ^a	1,611	--- ^a	--- ^a	1,593
^a No data available							
SOURCE: MAF and State Statistical Committee							

The effect of the reforms on farm population levels and rural-urban migration is one of the great uncertainties in this process. It is tempting to predict that an eventual rural exodus will occur, especially in densely settled areas such as Osh and Djalal-Abad. However, depending on the direction the reforms take in grain-growing regions in coming years, particularly in terms of the allocation and upkeep of large-scale machinery, sparsely settled areas could shed labor more quickly than densely settled areas because the latter, which are more horticultural, may have a greater capacity to absorb labor.

B. CROP PRODUCTION

Crop yields have declined during the restructuring period, with a particularly sharp drop between 1993 and 1994 (table 3.14). Grains, potatoes, and vegetables showed especially precipitous declines. There are multiple explanations for declining yields, including reduced access to fertilizers, pesticides, farm machinery, and other inputs; reduced attention to maintenance of the irrigation infrastructure; and, certainly, the breakup of many production-efficient large-scale farms. It is an article of faith among government reformers that smaller-scale production can yield returns equal to or better than those realized by large-scale agricultural enterprises. Granting that the very sharp declines seen during the early 1990s owe largely to the economic transition itself, and that yields may rebound as farmers settle into new modes of production and markets mature, there is a need for land reform realism as well. For instance, small-scale grain farming, without subsidized irrigation and guaranteed delivery of inputs, is unlikely ever to produce at the level of the former farms. Small-scale farming in some zones has production advantages. Elsewhere, it may have nonproduction advantages that more than offset reduced output. But overall it would be a mistake for reformers to allow their commitment to the ideology of devolution to interfere with a natural evolution toward optimal scales of production. In many parts of the country, the economy eventually will require the consolidation of farms to an efficient scale.

TABLE 3.14 Crop yields in the KR, 1990-94 (centnares/hectare)

Crop	1990	1991	1992	1993	1994
Grains, total	29.3	26	27.8	25.6	18.1
of which: <i>wheat</i>	26.4	22.4	27.3	26.2	18.3
<i>barley</i>	23.7	20.6	23.6	21.6	15
<i>maize</i>	61.8	58.5	51.3	45.2	35.3
<i>rice</i>	17.9	15.5	14.7	11.1	14.2
Cotton fiber	27.3	24.5	24.4	24.2	20.2
Sugarbeets	168.5	155.7	213.3	188.2	116.2
Tobacco	21.6	21.2	20.8	21.9	19.2
Potatoes	136	137	124	108	90
Vegetables	196	180	154	140	115
Berries	41.2	25.9	35.4	14.2	20.1
Grapes	63.2	45.3	50.6	15.9	25.6
Feed crops, total	--- ^a	--- ^a	--- ^a	--- ^a	--- ^a
of which: <i>hay</i>	58.2	53.1	53.1	51.3	42.8
<i>green fodder</i>	229.3	204.1	219.7	200	163.9

^aNo data available

SOURCE: State Statistical Committee

C. LIVESTOCK PRODUCTION

Livestock numbers show an even greater decline during the restructuring period (table 3.15). There are four parts to this process. First, reduced shipments of imported feed, especially to supplement limited winter pasture, forced a general reduction in herd size, especially sheep and cattle, after 1991. Second, prices for livestock products, especially wool, declined precipitously during the early 1990s, partly because of loss of markets and processing facilities associated with the collapse of the USSR. Livestock holders reacted by cutting livestock numbers. Third, many former state and collective farms responded to the 1994 requirement that they distribute shares in farm property by dealing first with livestock, which, unlike agricultural equipment and buildings, are reasonably divisible. Many cash-strapped, newly independent farmers, recipients of the distribution, disposed of these uncertain assets quickly. Fourth, the transfer of a large part of the Kyrgyz Republic's livestock into the private sector no doubt caused significant undercounting. One assumes, for instance, that statistically invisible poultry make up some of the difference between reported 1989 and 1994 numbers.

There is no reason that livestock numbers should not rebound, especially with greater internal production of winter fodder and export market development. Perhaps the major unanswered question in the livestock sector is that of smallholder access to pasture. Kyrgyz Republic's 9 million hectares of pasture remain in the hands of the state with access controlled by the rural committees. Full redevelopment of the livestock sector will require almost as much attention to tenure over pasture as tenure over cropland has received.

TABLE 3.15 Livestock inventories in the KR, 1989–1994 (000 head)

	1989	1990	1991	1992	1993	1994
Cattle	1,214.3	1,205.2	1,190	1,122.4	1,062.3	920.1
of which: <i>milk cows</i>	507.4	506.1	518.6	514.7	511.2	480.9
Horses	310	312.6	320.5	313	322	299
Sheep and goats	10,483	9,972.5	9,524.9	8,741.5	7,322.3	5,076.4
Poultry	15,206.7	13,914.6	13,571.2	10,420.5	6,916.5	2,208.4
SOURCE: State Statistical Committee						

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Chapter 4

LAND ADMINISTRATION AND IMMOVABLE PROPERTY REGISTRATION

by

Peter Bloch, Eric Gilbert, and David Stanfield

I. LAND ADMINISTRATION

Under the current system, the state retains ownership of land and much other immovable property (buildings, irrigation infrastructure, roads, and the like) and has a broad range of administrative responsibilities to ensure appropriate use. The government agencies that had the authority for immovable property management under the Soviet system still exist and retain much of their earlier mandate; to these agencies have been added several new structures, notably the State Property Committee and local institutions specifically created to implement the reforms.

Even if private ownership of land and other immovable property is permitted in the future, the state will still own a large amount of land: pastures, forests, hydroelectric installations, and various public areas such as nature reserves and national parks. Private ownership does not mean the owners can do anything they want on their land; instead a person holds or “owns” rights that are protected by the state's laws and police powers or by the customs and norms of the people. The state may retain certain rights to private property, such as:

- 1) the right to acquire private immovable property for public purposes;
- 2) the right to acquire ownership when the private owner dies and has no heirs;
- 3) the right to impose taxation on the owners of private property;
- 4) the right to forbid private owners to build on or otherwise modify certain immovable property;
- 5) the right to deprive private owners of certain uses of the immovable property, such as the application of toxic pesticides or the creation of a rubbish dump; and
- 6) the right to expropriate private owners who do not use the property to satisfy legally defined social functions.

This section will outline the existing responsibilities of the state and the organizations that are supposed to assume these responsibilities and then will present ideas about a reorganization of these functions to reflect the requirements of the emerging market economy. The second section will provide details on the current system of immovable property registration and make recommendations about an appropriate system for the future.

A. EXISTING RESPONSIBILITIES OF THE STATE

Currently, state agencies are responsible for virtually all aspects of land administration. Among the responsibilities of the various offices are: design of land and agrarian reforms; initial allocations of land and other immovable property to users; design of a legal and regulatory framework for the land market; registration of interests in land and other immovable property; surveying and mapping; immovable property taxation; dispute resolution; land-use planning and zoning; and administration of leases and appropriate uses of state-owned land, including the National Land Fund and pasture land.

Of these responsibilities, the first two are temporary. The others are not, and government will continue to provide these services even after land is privately owned.

B. AGENCIES INVOLVED WITH LAND ISSUES

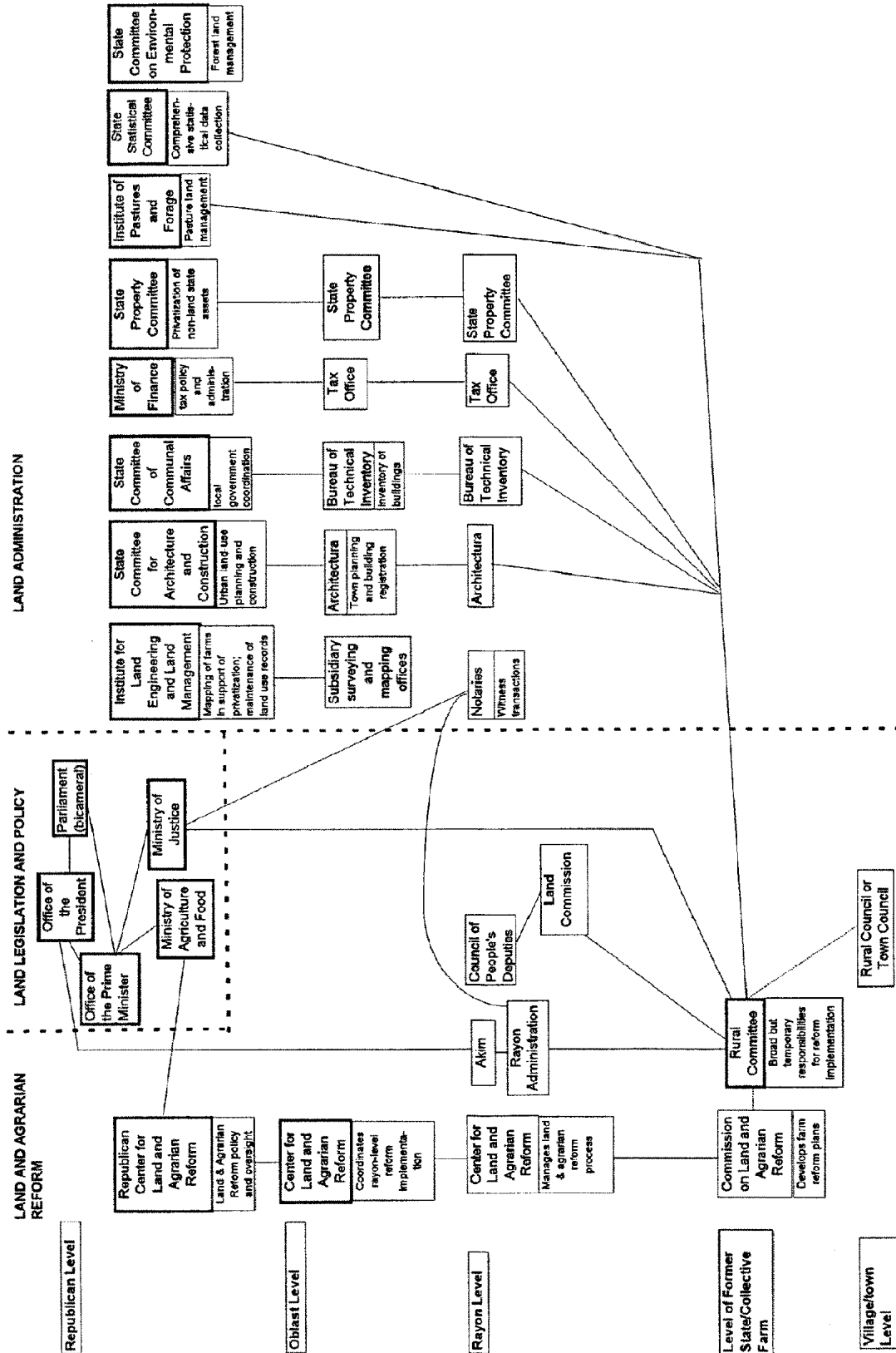
The land and agrarian reforms under way in the Kyrgyz Republic (KR) involve a multiplicity of agencies at all levels of government, with the Office of the President being the prime mover for overall policy. Authority for land management and administration is divided among various ministries, state committees, and agencies at the national level, the respective branches of these organizations at the *oblast* and *rayon* levels, and the rural committees and town councils at farm and village levels. Separate agencies exist for administration and monitoring of rural and urban land. New entities have been created specifically to realize the goals of the reform program. Some of these entities are considered temporary.

The complex institutional landscape for land management is shown in Chart 4.1. The chart differentiates three aspects of management: land and agrarian reform implementation; land legislation and policy; and land administration. The responsibilities of each of the institutions shown in the chart are given below and are also discussed in terms of their legal basis in chapter 2. It should be noted that—as is true in all graphical representations of administrative relationships—there is a great deal of simplification required in order that the picture be clear. As the discussion below should indicate, however, the chart captures the essence of the current situation and also points to the most fundamental issues needing to be resolved.

1. Agencies responsible for land legislation and policy

Office of President. The Office of the President includes both legal personnel and agricultural specialists who are involved in formulating policy and drafting or commenting on drafts of legislation. With particular attention to land and agrarian reform, the president's legal advisers are in the process of conducting a review of all legislation, checking for consistency and clarity. The president is responsible for signing all laws adopted by parliament and for issuing decrees for interim implementation of reforms prior to parliamentary action.

CHART 4.1
GOVERNMENT AGENCIES WITH RESPONSIBILITY FOR LAND IN THE KYRGYZ REPUBLIC



Administration of Government. The government, consisting of the offices of the prime minister, the presidium, and the cabinet of ministers, has both legal personnel and agricultural specialists who are involved in formulating policy and drafting or commenting on drafts of legislation. The prime minister issues government orders and regulations, and nominates candidates for ministerial positions.

Parliament (*Jogorku Kenesh*). The bicameral national legislature is responsible for considering and adopting all laws, and for confirming the ministerial nominees of the prime minister. This is especially important for the land and agrarian reform program at the present time, because parliament has to date refused several times to confirm the nomination of the Acting Minister of Agriculture, Bekbolot Talgarbekov, who has been the leading architect and advocate of the reforms within the government.

Ministry of Justice. No legislation on land or property issues can be introduced to the parliament without initially being reviewed by the Ministry of Justice. It also administers the judicial system of national, *oblast* and *rayon* courts. In addition, the Ministry of Justice controls the system of notaries at the *rayon* and *oblast* levels. Notaries provide legal witness to all land and property transactions, charging fees for the service that are to be contributed to the *rayon* budget. All newly-formed farm enterprises must have the official stamp of a notary to validate the papers registering them as a legal entity. Notaries are paid by the *rayon* budget, and methodology and instructions are received from the Ministry of Justice.

Ministry of Agriculture and Food. The MAF is responsible for all aspects of agricultural production and marketing (both crops and livestock), including, since February 1994, the land and agrarian reform program. Until November 1994, it conducted the reforms from a Division of Land Reform and Water Resources. Its role in policy and legislative formation consists of technical input to the government's and the President's overall vision of agricultural and land-related issues.

2. Agencies responsible for land and agrarian reform implementation

a. National level institutions and legal subsidiaries

Republican Center for Land and Agrarian Reform (CLAR). The Republican CLAR, a division of the Ministry of Agriculture and Food (MAF), was created to implement the reforms based on the president's 1994 decrees. The Republican CLAR is supposed to have a staff of about thirty, but several of the positions are still vacant. It is headed by a general director and has two divisions: land reform and agrarian reform. Tasks of the Republican CLAR include:

- ◆ assisting farms in determining land and property shares;
- ◆ explaining to farm workers and rural inhabitants the goals of the land reform program and their own rights and options in the reorganization of state and collective farms; and
- ◆ monitoring the progress of farm reorganization and conflict resolution during the course of reform implementation.

The *rayon*-level offices conduct the practical work in land and agrarian reform. This includes "explanatory work," where on-farm seminars are held to inform the farm population

of their options, rights, and responsibilities resulting from the land reform. The *rayon* CLARs also assist in inventorying property, surveying the landholdings of state and collective farms prior to reorganization, determining land and property shares, and surveying landholdings of newly-formed enterprises. The function of the *oblast*-level CLARs is to coordinate the work of *rayon*-level offices. They are to assist the *rayon*-level offices with the reorganization plans for the state and collective farms. Until recently the *rayon* and *oblast* CLARs were under the control of the *rayon* and *oblast* administrations, but now they are directly subordinate to the Republican CLAR in order to ensure better coordination and consistency of reform efforts.

The CLAR apparatus does not currently have a clear, logical hierarchy of tasks. On-farm implementation of the reforms should be performed by the *rayon* centers with support from *oblast* CLARs. *Rayons* should take on additional tasks of assisting farms in preparing business plans and maintaining a log, record, or database on farm restructuring. *Rayon* CLARs should have a staff of at least three, with some training in agronomy, economics, land law, farm management, and land surveying/engineering/registration (the latter at least until registration offices are established). *Oblast* CLARs should lend expert advice to *rayon* CLARs. *Oblast* staff should include specialists in land law, agricultural economics, farm management, tax/finance, and marketing. The Republican CLAR should focus on policy instead of implementation; it would then be better able to analyze data on farm restructuring from *rayon* and *oblast* centers with a view to policy formulation and correction.

b. Institutions at *rayon* level

Rayon administration. The *rayon* administration finances all organs at *rayon* level, although many of those agencies receive instructions from their national level counterparts. The *akim* is the executive of the *rayon* administration, appointed by the president for period of four years. The president has right to remove the *akim* at any time. The *akim* is responsible for facilitating implementation of land and agrarian reform in that *rayon* and has the authority to appoint the heads of the Rural Committees.

Council of people's deputies. The council of people's deputies is the *rayon* parliament and is elected every four years. It should decide all questions regarding land but has frequently delegated these functions to the *rayon akim*.

Rayon land commission. The *rayon* land commission is overseen by the *rayon* council of people's deputies. It reviews all applications submitted by legal entities for use rights on a specific land parcel. Land shareholders who have pooled their shares to form a legal entity must apply for a parcel of land through the local Rural Committee. The Rural Committee proposes a certain parcel of land to the enterprise (generally, the parcel proposed is at the request of the enterprise; if a conflict arises or there are many applicants for the same parcel, the situation is resolved by lottery) and passes the application to the Land Commission for examination. If approved, the application is passed on to the *rayon akim* for final approval, upon which the registration of the legal entity begins.

c. Local-level institutions

Rural committee. Rural committees were formed on the territory of each state or collective farm. They are supposed to have three to seven members. The chair is appointed by the *rayon akim* for three years and usually is the director of the former state or collective farm. The committee is financed by the *rayon* budget. The Rural Committee is a legal entity and has a bank account. It is responsible for:

- ◆ implementing land and agrarian reforms on its territory according to a plan worked out by the Commission on Land and Agrarian Reform and approved by the bodies mentioned above;
- ◆ providing infrastructure for newly formed enterprises;
- ◆ assisting the enterprises in marketing their produce;
- ◆ monitoring use of land and water, and ensuring that users' activities do not harm the land;
- ◆ resolving disputes about land distribution;
- ◆ keeping land categorization records (holdings of each land-user on territory) and forwarding these to the *rayon* administration at least once a year; and
- ◆ providing accounting, statistical, land and operational records to the *rayon* administration on the activities of each land-user on its territory once per year.

Commission on land and agrarian reform. This commission exists for each former state or collective farm. Its membership, of not more than 15 persons, must include representatives of the former state or collective farm, the head of rural committee, the head of the relevant Rural Council, a representative of the Ministry of Agriculture, representatives of *oblast* and *rayon* CLARs, and representatives of *rayon* financial institutions. Its duties are to:

- ◆ analyze financial and productive activities of former state and collective farms;
- ◆ conduct property inventory and appraisal;
- ◆ determine land and property share per person; and
- ◆ work up a plan for reorganization of the farm—a plan that is subject to approval by a general meeting of the former state or collective farm members, the *rayon* department of agriculture, and the *akim*.

Rural council. The rural council is the council of deputies at the village level, responsible for implementing all decisions of *rayon*, *oblast*, and national parliamentary bodies. Elections are held once every four years, as they are for the *rayon*, *oblast*, and national parliaments. The rural council reports to the inhabitants of its village the amount owed for taxes on land around houses and livestock. It is responsible for land administration on the territory of the village. It reports annually to *rayon*-level Statistical Committee, *Kyrgyzgiprozem* (survey/registration), and Bureau of Technical Inventory offices on population figures, area of land in yards and gardens, and records of registered construction projects on the territory of the village. It manages and administers the passport (*propisk*) regime of village.

Town council. The town council replicates the duties of the rural council for urban areas. Some town councils are subordinate to the *oblast* parliament, some to the *rayon* council of deputies, and one, Bishkek, to the national parliament.

3. Agencies responsible for land administration

a. Agricultural sector

State Institute for Land Resources and Land Management (*Kyrgyzgiprozem*). *Kyrgyzgiprozem* (*Kyrgyzmamzherresurstary* in Kyrgyz) is responsible for maintaining an inventory of land resources for the KR. It compiles an annual inventory of land resources with detailed figures on landholdings of each agricultural land user. Every five years, a cadastre is prepared on the basis of the annual reports. During the Soviet period such detailed record-keeping was possible with a total of only about 500 agricultural users (state, collective, and specialized farms) in the republic. The farm reorganization program has raised that number to over 24,000 units as of mid-1995. Coupled with the 75 percent decrease in staffing at *Kyrgyzgiprozem* since the early 1990s, the likelihood that such detailed land categorization can and will continue is small.

The institute has a cartographic division that prepares the base maps of state and collective farms from air photos. Several divisions have been eliminated in the past few years, including a water resources division and one that prepared production plans for collective and state farms. The main task of the institute now is to catalog the holdings of agricultural users and maintain an inventory of the country's land resources.

Rayon-level offices survey landholdings of state and collective farms and of new farm enterprises formed during reorganization. For the annual land register, the office collects from the rural committee heads a record of landholdings of all enterprises existing on the territories of the former state or collective farms.

Institute of Pastures and Forage. This institute is subordinate to the MAF. It is responsible for estimating the carrying capacity of pasture lands and informing local authorities about appropriate stocking rates. The Pasture Inspection Service, part of the institute, has an unclear role in monitoring and inspection of pasture management.

State Committee on Environmental Protection (*Goskompriroda*). *Goskompriroda* is responsible for the management of forest lands, including those on the territories of the former state and collective farms. The Forest Department is responsible for the State Forest Fund, which covers about 15 percent of the KR's territory. Only about 4 percent of the country is forested; the rest, degraded or completely deforested, is used as pasture.

b. Urban sector

State Committee on Architecture and Construction (*Gosstroj*). *Gosstroj* exists at the national level with affiliates in the *oblasts* and *rayons*. It is the state agency for city and regional planning. It has responsibility for privatizing apartments and other urban properties. As the MAF has done for rural reforms, *Gosstroj* has devised most of the decrees and regulations, and proposed the laws that have laid the foundation for urban land reform. The head of *Gosstroj* has the status of minister, as is true of all state committee heads.

Architectura. Subordinate to *Gosstroj*, the *Architectura* serves town, city, and regional planning functions. *Rayon* offices are its lowest level; they are subordinate to *oblast* level offices. *Architectura* registers urban owners and users of immovable property and reports this information to the *rayon* tax office. It must report on its records to *rayon* land engineering service for compilation of the annual “land register” prepared by *Kyrgyzgiprozem* in Bishkek.

State Committee of Communal Affairs. Formerly a ministry, the State Committee of Communal Affairs is responsible for the coordination of local government activities. Its responsibility for land administration is limited to its oversight of the Bureaus of Technical Inventory.

Bureau of Technical Inventory (BTI). BTI concentrates all information on immovable property, such as location, area, and owner of property. It maintains an archive for all blueprints, construction plans of houses, apartments, and other immovable property. It has offices at *rayon* and *oblast* level, subordinate at national level to the State Committee of Communal Affairs. BTI is financed by *rayon* and *oblast* budgets. Its methodology and instructions are received from Bishkek.

c. Economy-wide

Ministry of Finance–Tax office. The Ministry of Finance is responsible for tax-rate determination, assessment, and collection, including land tax. The *rayon* tax office, where most taxes are collected, is indirectly subordinate to the *rayon akim*, and directly subordinate to the *oblast* tax office.

State Property Committee (*Goskomimushestva* or GKI). GKI was responsible for all privatization efforts until February 1994, when a presidential decree transferred responsibility for the conduct of land and reform to the Ministry of Agriculture. There remains some ambiguity about which agency is responsible for privatization and restructuring of agroindustrial enterprises. GKI currently manages privatization of industrial and commercial enterprises. It organizes auctions of immovable property belonging to former state-owned enterprises and has conducted auctions of immovable farm property as well. GKI is included in the property appraisal process at the farm level.

State Statistical Committee (*Goskomstat*), now known as the National Statistics Committee. *Goskomstat* collects statistical information from all departments. Regarding land and immovable property, it records registration of all legal entities for industrial, agricultural, and other enterprises. It records land users according to category. It has a department of registrar where all land users are listed according to category (agriculture, industry, nature reserves, etc.). *Goskomstat* serves a type of zoning function for land users. Its influence resides in its legal authority to require all agencies to report the kind of information it requires. This was important in the days of central planning, but in the current system there is no need for the same amount of detail.

4. Summary

As Chart 4.1 shows, there are a large number of agencies with partial, but overlapping, responsibilities for land management. As is appropriate, the two principal institutions with direct authority to implement the reforms (the CLAR structure and the Rural Committees) are temporary organizations, designed to disappear when land distribution and farm restructuring are complete. The problem is that one of them, the Rural Committee, is the focal point not only of on-the-ground implementation of the reforms but also of the ongoing administration of land and property assets. The chart demonstrates that the links between the reform process on one hand and legal, policy, and administrative agencies on the other converge on the Rural Committee at the local level. There is no such linkage with the CLAR apparatus, especially since the recent reorganization that made the *rayon* CLARs independent of the *rayon* administration.

C. INSTITUTIONAL REQUIREMENTS FOR LAND ADMINISTRATION IN MARKET ECONOMY

The market economy and the very much larger number of identifiable land users than in the past will require modifications of the institutional arrangements for land administration. The reform process has already created new institutions, while none of the old ones have disappeared (although some have lost significant numbers of staff). There is a need for redefinition of the responsibilities of all of the agencies listed above to reflect their new role as regulators of market activities rather than agents of the command economy. There is probably also the need for the creation of a new department, whose location is yet to be determined, to supervise the immovable property registration process. Furthermore, environmental issues and demographic pressures, especially rural to urban migration, will require a new approach to land use planning. It is imperative to begin planning now for the management system that will be in place once the initial wave of privatization and restructuring has been completed. Specific recommendations are given below.

R4.1 Clarification of responsibilities for land and agrarian reform. The key issues here involve the overlapping responsibilities of several agencies at the *rayon* and local levels. The CLARs and the Commission on Land and Agrarian Reform on one hand, and the *rayon* administration and the Rural Committees on the other, appear to have competitive mandates to implement the reforms. The *rayon* Land Commission and the various Councils of People's Deputies also are involved in certain aspects of the reform process. There are simply too many institutions involved, and the potential exists not only for duplication of efforts (already in evidence) but also for conflicts in approach that paralyze the reform process. The CLAR apparatus down to the farm-level Commission must be given full authority to implement land distribution and farm restructuring and to disappear when the reforms are complete. The role of the Rural Committees should be seriously reconsidered; a temporary institution should not be given such a large number of tasks that will continue to be necessary after the reforms. Because there will be no need for institutions at the former farm level once all land has

been redistributed and farms restructured, some of the Rural Committee's tasks should be transferred to *rayon* level and some to the village level.

R4.2 Reassessment of ongoing land administration responsibilities. There should be a reassessment of current land administration agencies and their fulfillment of their current mandates in four areas: (1) land taxation; (2) dispute resolution; (3) land use planning and zoning; and (4) administration of publicly-owned land.

The assessment should identify superfluous, missing, and overlapping responsibilities. When required, new administrative systems should be designed for each of the four subject areas. Experience from other countries undergoing similar reforms will undoubtedly prove helpful. New legislation, training, and technical assistance will be required to implement the new systems. The appropriate governmental level for each task should be specified. (It is felt at this stage that *oblast*-level institutions will not have important responsibilities in any of the subject areas.)

R4.3 Land taxation. The objective of reform in this area is the conversion of the land tax from a technical coefficient base to a value base, as markets increasingly give evidence of land values. The land taxation system should be improved at two levels: (a) the *rayon* tax offices which are responsible for collection; and (b) the national level, where policy is formulated. At the *rayon* level, the most likely need is to upgrade the office staff's skills both in valuation/appraisal and in accounting. Material support in the form of office equipment, supplies, and transport may also be required. At the national level, both the economic skills needed for land tax policy formulation and the administrative skills needed for implementation will most likely need to be upgraded.

R4.4 Dispute resolution. The objective of reform in dispute resolution is to ensure equitable and rapid handling of land conflicts, including boundary disputes, inheritance disagreements, and conflicts over subdivision or amalgamation of land parcels. This will enable the KR to avoid the problems of overcrowded civil court dockets, lengthy delays, and unfair rulings that too many countries experience in land-related cases. The main requirement is training of local and *rayon* level officials in the details of land legislation in the KR and methods of dispute resolution. Additionally, there is a need to review national-level policy and legislation about dispute resolution procedures and recourse, as well as about schedules of costs, fines, and awards to which the parties to the disputes will be subject.

R4.5 Land use planning and zoning. The objective of reform in land use planning and zoning is to enhance the capacity of government institutions to guide individuals and communities in making appropriate decisions about land use. The freedom of movement and market pressures stimulated by the new economic system will create demands to convert land from one use to another, for example, from agricultural to residential uses. The market system cannot be seen as a license to use land without any government oversight.

To address these issues coherently will require a rethinking of the procedures of acquiring, analyzing, and utilizing information about land use. It will also require upgrading both of the human and material resources of the agencies that will be responsible for land use planning and zoning.

At the central level, a land planning agency would require: technical expertise in economic, demographic, and geographical analysis; and administrative capacity for administration of standards and training of local personnel.

At the local level, the agencies will require city and regional planners capable of formulating land use plans and assessing and approving proposals for land use changes. Especially in *rayons* undergoing urbanization pressures, the agencies must be able to work closely with town *Architectura* offices to ensure that new construction takes place on land where urban growth is most appropriate. Their staff must be adequate in both quantity and quality to be able to respond effectively to the need for changes, instead of being an administrative roadblock to reasonable economic development. Not all *rayons* will need the same level of staffing, but even the most stable, remote, and underpopulated *rayons* will need access to specialized personnel at particular times. Thus the institutional structure should have a component of on-loan technical personnel who can provide services on an as needed basis.

Administrative training will be required in: (a) how land use planning and zoning are done in other places; (b) how to make decisions, especially how to exercise appropriate discretion without the exercise of arbitrary authority; (c) reasons for and ways of obtaining meaningful citizen participation; (d) how to keep appropriate records, and how these records are to be used in the decision-making process; and e) the relationship of enforcement to laws/rules/plans.

Technical training will be required in applications of demographic models and analysis (population models and housing demand) and in Geographical Information Systems (GIS, whether computerized or manual) to assess land capability and capacity, ownership patterns, and environmental issues.

R4.6 Administration of publicly owned land. The objective of reform in public land administration is to enable the government to manage the land resources to which it retains ownership efficiently and rationally. Under the current system of 49-year leases of agricultural land, the reforms will dramatically increase the government's management load. Instead of the relatively simple task of monitoring several hundred state and collective farms, it will have to administer the leases of tens of thousands of farm enterprises, and eventually perhaps hundreds of thousands. As the enterprises inevitably transform themselves through fragmentation and merger, the government must be able to keep track of the changes in order to ensure that the appropriate enterprises are responsible for the land. Even if the government decides to convert the agricultural leaseholds into private ownership, the state may continue to retain control of two important components of agricultural land: the National Land Fund and

pastures; together these amount to over 40 percent of the national territory. Beyond these, rural lands in forests and protected areas will require management attention.

The administrative structure will require reassessment and reform at the national level—developing and implementing coherent and streamlined land administration policies and fee schedules for land leases—and at the *rayon* level—increasing the capability of local administrators to implement the policies.

II. IMMOVABLE PROPERTY TITLING AND REGISTRATION

The transition to a market-oriented economy necessarily involves the clarification of private rights to land and other immovable property. The definition of these private rights in the KR has been evolving. For now, the state retains ownership of the land but devolves, via 49-year inheritable grants to private individuals, families, and legal entities, the right to exclude others from access to the land and to transfer use rights to others through sale, lease, mortgage, and inheritance. The state retains the right to repossess land that is not used by private holders according to law. Since a large portion of the “bundle of rights” to land is being transferred to private entities, a system for recording, displaying, and protecting these rights is imperative, especially in light of the anticipated emergence of dynamic land markets.

At present, there is no single, unified system for registering and recording ownership rights on all types of immovable property. There are separate systems for recording information about some ownership rights on urban properties and about the quantity and quality of landholdings in rural areas. These systems are inadequate to meet the demand for land and property transfer, leasing, and mortgaging that is expected to emerge as an immovable property market develops. Developing a registration system to record all immovable property interests is crucial in facilitating the development of a market in immovable property and the market economy in general.

A. URBAN NEEDS

The current urban development environment of the KR gives evidence of a need to invest now in the creation of a registration infrastructure. With more than 165,000 apartment units privatized since 1992, a brisk market in sale/purchase of apartments has developed. Based on preliminary compilations contained in the real estate market data base assembled by the International City/County Management Association’s Bishkek office, approximately 2,700 units changed hands in the period between 1 July 1994 and 1 May 1995. If this embryonic market is to flourish, the property interests which are being exchanged in these transactions must be stable and clear. With the likely emergence of a mortgage law in the near future, registration will become a critical element in collateralized lending. Furthermore, if the much hoped for advent of a significant increase in investment (both domestic and foreign) is actually to occur, it will of necessity be preceded by a level of confidence on the part of investors that can be achieved only with a sound, credible registration system.

The capacity to efficiently register the wide variety of property interests that will continuously evolve in a market environment is an essential "utility" for sound urban development. A sound and functional system will be characterized by:

- ◆ consistent laws and regulations that apply to all types and phases of real estate activity, both urban and rural;
- ◆ property rights that are clearly defined and well-protected by a uniform, integrated system of property/land registration that is fully operational;
- ◆ technology support for registration and related activities that is appropriate to current capacities and needs; a clear, well-planned "migration path" must be an integral part of the overall registration strategy;
- ◆ trading and exchange of properties that is efficient, rapid, and cheap;
- ◆ a good balance of owner and tenant rights; and
- ◆ differentiation of the responsibilities of central and local governments with every function carried out at the lowest possible level.

There are a number of important needs in the urban environment that cannot be met in the absence of a sound registration system. If urban governments are to accept the greater role in service provision that is advocated by those who are dismantling the centralized structures which characterized the command economy, cities must be given improved systems of municipal finance. One of the most logical local options for revenue generation to meet these new service needs is some form of property tax. A functioning registration system is an essential foundation for municipal property tax administration. Further, in a market economy in which the state is divested of much of its ownership of assets, the registration of easements and rights-of-way for municipal and other utility and transportation functions is essential. In addition, there are other lesser but still important uses of the registration utility in urban infrastructure management.

B. RURAL NEEDS

As of July 1995 land markets in rural areas are undeveloped. There is no great clamoring for land sale, purchase, or rental in most areas because the implications of privatization are just beginning to be understood and most rural dwellers still are deciding what they want to do with their land. Furthermore, lack of agricultural credit makes mortgaging and collateral issues moot at present. This quiet period is likely to end by the beginning of the 1996 planting season. More and more rural residents will decide to sell or rent their land shares or parcels, while some enterprises will seek economies of scale by enlarging their holdings through land purchase or lease. Land Tenure Center research carried out in 1995 shows why this is so:

- ◆ All residents of most former state and collective farms received land, but a great many are unlikely ever to farm. Administrators, social service workers, technicians, and persons employed full-time off the farm constitute more than 50 percent of the working-age population of many former state and collective farms. When pensioners are added to those who received land but are not now farmers, it is obvious that land transfer of one kind or another will be extremely common in the near future.

- ◆ In heavily populated *oblasts* such as Osh and Djalal-Abad, the land shares allocated to individuals often are less than 0.05 hectare. Even when a nuclear family pools its individual shares, the family total is frequently less than 0.25 hectare. Groups of families are consolidating their holdings to achieve a plot that is farmable and/or meets the government-mandated minimum farm size. But it is clear that under these conditions large numbers of rural dwellers can have no effective role in agriculture in the future: neither their labor nor their management input will be needed, and they will soon be seeking to sell or lease their shares or parcels.

Meanwhile, credit markets will have to emerge in rural areas if agriculture is to prosper. Therefore, farmers will very soon need land titles secure enough to satisfy lenders' collateral requirements. In regions where land privatization has been embraced fully and small-scale agriculture is emerging, new landholders are acutely aware that to obtain credit they will need secure title. It may be especially helpful to begin pilot land registration projects in areas where there is high enthusiasm for private farming and market relations, and where farmers seem to understand intrinsically the functioning of agricultural credit and finance.

A land registration system cannot be put into place overnight. However, current conditions suggest that it would be extremely helpful if the details of an emerging system were understood in rural areas of the KR by early 1996, and if work had begun to operationalize a simple but workable system in pilot regions selected on the basis of pressing need.

C. RECOMMENDATIONS FOR BASIC PRINCIPLES OF IMMOVABLE PROPERTY REGISTRATION SYSTEM

- R4.7 All types of immovable property, land and fixed structures, urban and rural, should be included in a single registry.** There are two principal justifications for this idea: first, efficiency—a single system will be more cost-effective and easier to monitor and to finance, and, second, flexibility—it will be much easier for immovable property to move from one type of use to another, agricultural land to residential use, for example, since much of it inevitably will as cities expand.
- R4.8 Ownership and other interests listed in the registry should be considered legally valid.** The importance of secure rights to the operation of a market economy cannot be overemphasized. In some countries, such as the United States, the documents recorded in the registry are not considered legally valid but merely as evidence about the history of the immovable property's title. In order to give security to market participants, therefore, the US system requires the involvement of title insurance companies and real estate lawyers. This considerably raises the costs of each market transaction (as do notaries in the KR and other countries without operational registries). Poor countries cannot afford such luxuries, and therefore it is preferable that the state guarantee that the interests listed in the registry are legally valid.
- R4.9 The system should be parcel-based, with each parcel having a unique identifying number.** A parcel-based system, as opposed to an owner's name-based system, is

much easier to access by individuals seeking information about potential market transactions or by government agencies in pursuit of their land administration duties. The requirement for a unique identifying number is more technical and eliminates the possibility of confusion in parcel identification.

R4.10 The system should be decentralized. The appropriate location for the immovable property registry is the *rayon*, which is of the appropriate scale to handle both paper and computerized records. Paper documents, that is, maps and titles, should be stored at the *rayon* registry. There is no need for *oblast*-level or national-level document storage as long as adequate security is built into the storage system in the registry offices. Information on the number and type of registry transactions may, if required for other governmental purposes, be transmitted to higher levels in summary form.

R4.11 Information included should be limited to parcel descriptions, ownership, and other interests in the immovable property. The information contained in the registry must not be complicated by extraneous elements such as land quality indices, tax records (except if there is a lien placed on the parcel due to nonpayment of taxes), or detailed information about the owners and other interest holders. The immovable property registry should have one simple task: to serve as the recorder of ownership and other interests in immovable property. Users of the system will therefore have access only to the information they need in order to reassure themselves of the validity of the rights to the parcel and not to information that would preferably be confidential or superfluous.

R4.12 Access to records should be open to the public. The purpose of the registry is to be a public repository about immovable property ownership and other interests. Potential or actual market participants must therefore be able to consult the documents and/or computerized records in order to prepare their offers to buy or to sell, to lease, to bequeath, to subdivide, or to amalgamate.

R4.13 The system should be self-financing after initial registration. The registry is a public service provided to land market participants (including the government in some cases). Because it facilitates transactions by being the legal guarantor of interests in immovable property, it serves to reduce transactions costs for the participants. Since the benefits of the system are primarily private, users of the registry should pay for the services it provides. A relatively modest fee schedule will enable the registry at least to recover its operating and equipment amortization costs. Some *rayons* with a large volume of high-value transactions may generate large surpluses, and others, with less activity and lower property values, may experience deficits. The important goal, however, is for the system as a whole to break even. There is one caution, however: the fees charged by the registry must be affordable, so that market participants are not deterred from using it.

See Annex 4.1 for a demonstration of the calculations required to determine if self-financing is possible.

ANNEX 4.1
FEASIBILITY OF A SELF-FINANCING
IMMOVABLE PROPERTY REGISTRATION SYSTEM

In the absence of a land market, it is not possible to use actual figures to justify the feasibility of a self-financed immovable property registration system. Hypothetical but realistic examples can, however, shed light on the situation. The information required is the volume of transactions, their average value, and the costs of operating the registration system. It is then possible to compare the average cost per transaction to a reasonable fee schedule.

1. Volume of transactions

This information is the most speculative, because there is no experience with immovable property markets in the KR. Experience in countries with mature immovable property markets suggests, however, that there will be registrable transactions (sales, long-term leases, inheritance transfers, mortgages, liens) on from 10-50 percent of all immovable property parcels per year. In the KR, there are currently 165,000 privatized apartments, at least 30,000 identifiable private farm enterprises, and an unknown number of privately owned residences, plus the multitude of commercial real estate and government-owned land and buildings. One can conservatively estimate the number of parcels that the registration system would have to record at the present moment at 250,000. If individualization of rights to agricultural land continues to grow, as it is likely to do, there is a potential for many more parcels: if each rural family held two parcels, a house plot or apartment and one agricultural plot, their total would be nearly 1,000,000 parcels. Similarly, if each urban family held one parcel, a residence, their total would be nearly 400,000 parcels. In reality, rural families may hold more than two (a hayfield and an orchard, for example), and urban families may have dachas or other holdings. In Albania, a country that individualized residential and agricultural properties completely after the fall of communism, there are approximately the same number of identifiable parcels as there are people—not families—in the country: 3 million. It is advisable, however, to underestimate than to overestimate the potential volume of transactions. The figure of 250,000 parcels is therefore the base for further calculations.

It is equally difficult to predict the percentage of parcels over which there will be transactions in a given year. In the first years of operation, the volume of transactions might be low because people have not yet gained confidence in the system, or it might be high, at least temporarily, as people make transactions that they have postponed in the past due to the absence of tenure security. Again being conservative, we can estimate the volume of transactions to have a range of 10,000-50,000 per year on the existing number of parcels (and many more as the number of parcels grows).

2. Value of transactions

This is important to calculate because the fee structure of the registry should include value-based charges. The justification for this is that the essential service provided by the registry's guarantee of ownership and other interests is economic because the value of the immovable property is protected by the state.

Again there is little information about real estate values in the KR. For residential property, the range is probably from about US\$5,000 to well over US\$100,000. For agricultural land, one can estimate value based on the land's productivity; land served by functional irrigation systems can produce crops with an annual value of US\$200–500 per hectare which, if capitalized at 10 percent,

yields an estimate of land values at US\$2,000–5,000 per hectare. If the average parcel on which there is a transaction is 5 hectares, the value of the parcel would thus be US\$10,000–50,000.

3. Costs of operation of the registry

Calculations conducted in the preparation of the *Consolidation Plan* suggest that the full cost of operating the registration system will be on the order of US\$3 million per year, including salaries, material supplies, and amortization of equipment. Most of these costs are the salaries of the local registration and survey officials (\$1.8 million per year), which in the *Consolidation Plan* calculations were set at private market levels rather than official government pay scales. Depending on the future status of the registration system, the salary costs could in fact be much lower than assumed here.

4. Costs of operation of the registry per transaction

Volume of transactions per year	10,000	20,000	30,000	40,000	50,000
Cost of registry per transaction	\$300	\$150	\$100	\$75	\$60

5. Potential fee schedule for the registry

Cost recovery would be best served by two fees: one that is fixed per transaction, and the other that varies with value of the transaction. In Dane County, Wisconsin (USA), the fixed fee per transaction is US\$10, and the variable fee is US\$3 per US\$1,000 (0.3 percent). These fees are very modest, especially when compared to the much larger fees currently charged by notaries (3–5 percent of the declared value of a transaction; such a fee either discourages use of the system or gives incentives to the transactors to understate the value of the transaction). This yields the following table of registration fees per transaction:

Transaction value	\$5,000	\$10,000	\$20,000	\$50,000	\$100,000
Registration fees	\$25	\$40	\$70	\$160	\$310

6. Conditions for self-financing

Thus the registry could break even if there were 20,000 transactions per year with an average value of \$50,000, or 40,000 transactions per year with an average value of \$20,000.

Given the speculative assessments given above, it is felt that there is no reason why the system could not become self-financing within a year or two of establishment.

Chapter 5

DIMENSIONS OF FARM RESTRUCTURING IN THE KYRGYZ REPUBLIC: ASSESSMENT OF FARM-LEVEL PROCESSES AND CONSTRAINTS

by

Michael Roth, Katie Rasmussen, Erika Nystrom, and James Delehanty

I. INTRODUCTION

The purpose of this chapter is to analyze the progress of the restructuring effort, its regional variability, and the procedures used to redistribute land and property (nonland assets). The analysis is based on field data gathered from case-study research and statistical surveys of heads of rural committees and newly formed enterprises. Section II of this chapter explains the research methodology employed and the sampling frame for choosing respondents. Section III provides a statistical profile of the former state and collective farms in the sample, describing their human resources and land and capital assets as they existed prior to 1991. The organization of rural committees is the focus of section IV, followed by section V, which assesses the progress achieved in the two major farm reorganizations to date—the initial program, 1991 to 1993, and the second phase, in 1994 and 1995. Section VI describes the characteristics of newly formed enterprises created out of the restructuring efforts, in particular, their family structure, their land resources, the characteristics of the enterprise head, and the decision-making structure. In section VII, data are presented on three key aspects of landownership: land rights, land transfers, and land boundaries. Section VIII deals with property ownership among new farming enterprises, focusing on livestock, buildings and equipment, and the nature and scale of the debt burden transferred to the enterprises from the former state and collective farms. Rankings of the severity of selected agricultural problems facing the agricultural sector are analyzed in section IX. Finally, section X presents data that assess the overall performance of the farm reorganization program to date from the perspectives of rural committee heads and newly formed enterprise heads.

II. RESEARCH METHODOLOGY

A. STUDY OBJECTIVES

To date, apart from consultant reports based primarily on anecdotal evidence and nonsystematic interviews, no studies have been located that analyze the scope and depth of processes used by rural committees to implement the reforms in the Kyrgyz Republic. Systematized

knowledge is also lacking on the desires of households for private ownership of land and property, on their aspirations as farmers, and on the constraints they perceive on operating in the new market system. The research described here was undertaken in the spring of 1995. A number of general questions guided the field research:

- ◆ **Status of farm restructuring.** What progress has been made in implementing the reforms in different regions? Specifically, what processes have been used in farm restructuring, how much variation has there been, how have land and property shares been calculated and divided, and what are the key factors either promoting or inhibiting the reforms regionally? What factors have led to the creation of private versus multiple-family peasant farms, and what impact has the pooling of land and property shares across households to form peasant enterprises had on individuals' access to land?
- ◆ **Governance.** What modes of governance and levels of democracy are associated with the establishment and operation of rural committees and the management of newly formed enterprises? Are household interests being represented adequately in the privatization effort?
- ◆ **Nature, assurance, and transferability of land rights.** What land rights are held by various groups on newly formed enterprises? What is the quality of those rights, especially their transferability, and are those rights different for land shares than for physical land parcels? Can individual households freely enter and exit enterprises, and do they expect to receive fair and just compensation for the sale and/or rental of their property?
- ◆ **National land fund.** To what extent have rural committees set aside land for the national land fund, and in what amounts? How is such land being used? If rented, upon what terms and conditions?
- ◆ **Capital assets and farm debt.** To what extent are indivisible inputs (buildings, tractors) curtailing land privatization or forcing households into farming models not to their liking? To what extent have changes in farm assets led to problems of distress sales, capital consumption, or corruption associated with the divestiture? Have the debt burden and its impending transfer to new farm enterprises retarded the pace of restructuring?
- ◆ **Market linkages.** To what extent have failures in capital and input supply and in commodity markets hindered recovery and growth in the agricultural sector?

B. RESEARCH DESIGN AND SAMPLING FRAME

Preliminary visits to rural committees in February and March 1995 provided researchers with an understanding of the rich variety of processes that have emerged for the distribution of land and property in the Kyrgyz Republic. Based on these preliminary visits, a three-phase research approach was designed to examine the restructuring process. A one-round questionnaire was

developed and administered to heads of rural committees (RC questionnaire), which are responsible for implementing the reforms on the former state or collective farms. A second questionnaire was administered to heads of newly formed enterprises (EH questionnaire), including cooperatives, peasant associations, peasant farms, and private farms. The RC questionnaire emphasized rural committee organization and the redistribution process for land and property shares. The EH questionnaire focused on the outcome of the land and property distributions, their equity, the land rights they conferred, the decision-making processes in the newly formed enterprises, and the constraints perceived in operating in the new market system.

Neither the RC nor the EH questionnaire, by nature of the sampling frame, satisfactorily solicited the opinions and views of individuals and families within newly formed enterprises. A third research instrument, household case-study interviews, was therefore used to assess the potential demand for private ownership of land and property at the household level and to evaluate constraints perceived by families in the move toward a market economy. Case-study interviews were also held with *rayon akims*. As the chief government officials responsible for administration and economic coordination within each *rayon*, the *akims* oversee the activities of all rural committees within their jurisdiction and are better positioned to comment on the accomplishments and constraints of the reform effort as they pertain to the broader economic development of their *rayons*.

Thus, using several research approaches, the research sought to clarify the views of the key agents responsible for implementing the farm reorganization program, including (from most to least centralized level within the *rayon*) the *rayon akim*, the rural committee, the heads of newly formed enterprises, and finally, families within enterprises.

C. SAMPLING FRAME

Names of all former state and collective farms were obtained from the *Land Register of the State Inspectorate on Land Engineering* along with information on the *rayon* in which they were located. Approximately 10 percent of the former state and collective farms that existed in each *oblast* prior to the 1991 restructurings was selected randomly for interviews.¹ If the number of farms randomly selected in a given *oblast* fell below five, additional farms were added so that a minimum of five was obtained. For each sample farm, enumerators were instructed to administer the RC questionnaire to the head of the rural committee and the EH questionnaire to between one and three heads of newly formed enterprises.

D. INTERVIEWING PROCEDURES

The RC questionnaire was to be administered to the head of the rural committee who sometimes but not always was the former director of the state or collective farm. If the rural committee head was unavailable, enumerators were instructed to speak, first, with his or her

¹ Of the roughly 450 state and collective farms that existed prior to 1991, 47 were selected for interviewing. The sampling percentage is in fact higher than 10 percent, since 30 or so pedigree seed and stock farms were until recently exempt from the restructuring effort. A slightly larger sample would have been desirable, but limited resources and the 6-month time frame from preliminary planning to final submission limited the scope of field research.

deputy, or else with the economist of the former state or collective farm or another knowledgeable person. If the farm had essentially not reorganized, so that one person (often the head of the former state or collective farm) remained the head of the rural committee and also the head of the only enterprise on the former state or collective farm, enumerators were instructed to administer the RC questionnaire to the farm economist, and the EH questionnaire to the enterprise/rural committee head.

As noted above, the EH questionnaire was administered to the heads of between one and three restructured farm enterprises formed out of the former state or collective farm. These were commonly heads of peasant (multiple family) farms, but in some cases they were private farmers, heads of peasant associations, or heads of cooperatives.² Upon visiting the rural committee head, the respondent was first asked for the names of the heads of all the newly formed enterprises on the territory of the former state or collective farm. Enterprise heads were randomly selected for interviewing according to the following quotas: one sample enterprise if the former state or collective farm was comprised of between one and five new enterprises; two sample enterprises if there were between six and ten new enterprises; and three sample enterprises if there were more than ten enterprises. If the head of one of the chosen enterprises was unavailable, enumerators were instructed to interview his or her deputy or draw another farm name randomly from the pool.

In addition to the statistical surveys, semi-structured interviews were to be conducted with households in 20–25 newly formed enterprises. These interviews were intended to provide insight into the views of rank-and-file members, which may differ considerably from the views of enterprise heads. Interviews were conducted only on farms included in the above sampling frame during the farm visits on which the enumerators administered the questionnaires. Special care was taken to interview a variety of household members, including men and women, younger and older adults, pensioners, service workers, and production workers. While it was difficult to keep enterprise heads or household heads from choosing informants, every attempt was made to ensure a good cross-section of enterprise members. However, in practice female respondents were often surrounded by other family members or by their husbands, and in these cases women tended to defer to their brothers or spouses.

All survey instruments were produced in Russian. Questions were administered to respondents in the language (either Russian or Kyrgyz) in which they felt most comfortable. Most of the enumerators could communicate in both languages, but special effort was made to match the language skills of the research team with the language of the respondent.

² Several different classification systems have been used during the restructuring period. For the sake of simplicity, the survey contained only 3 categories, which correspond more or less to the official categories used in 1994 and early 1995: private farm, defined as a single-family farm operating independently; peasant farm, defined as a multi-family farm operating independently; and cooperatives/associations of peasant farms, defined as large, communally operated farms. While cooperatives tend to be smaller than associations of peasant farms, both of these models basically represent a miniaturization of the former state or collective farm and continue to operate along old principles. For more discussion and a history of the classification system, see chapters 2 and 3.

E. RESEARCH TEAMS

Four students, two women and two men, from the land engineering faculty of Scriabin Agricultural Academy assisted with the data gathering. Two other women, currently unemployed but with prior experience on the farms (and one with an advanced degree), were selected from a pool of candidates to facilitate, coordinate, and manage the logistics of the interviews. One to three researchers from the University of Wisconsin team visited the farms along with the students, primarily to conduct interviews with households and with *rayon akims*. The teams traveled in two cars within an *oblast*; depending on the location of the farms, they either visited one farm and worked together, or they carried out interviews on two farms simultaneously.

F. CAVEATS

Two unique characteristics of the farm reorganization program in the Kyrgyz Republic have fundamental implications for the interpretation of research findings.

First, a rich variety of paths are being pursued in the restructuring effort. Some former state and collective farms have distributed land only once to newly formed enterprises. However, others did an initial distribution in 1991 or 1992, then recombined, then split into two or more cooperatives, then split again into peasant farms. Basic questions about paths or roots of restructuring and about changes in resource holdings and in land-use management did not always lead to easy answers or tabulations.³ This problem is compounded by the lack of clear definitions and divisions between private farms, peasant farms, associations of peasant farms, and cooperatives. While good data were collected, readers should nonetheless be aware of the difficulties involved in collecting and tabulating data about types and numbers of farms amid the uncertainties created during the transitional period.

Second, the vast majority of farms began a restructuring effort (some for the second time) in the fall of 1994, and that effort continued through the spring of 1995. Hence, the surveys and case studies were being implemented during a time of significant structural change in the farm sector. The survey responses show some definite trends in the restructuring, yet there are two underlying weaknesses—farmers did not always understand various processes or elements of the restructuring program, which sometimes resulted in confused responses, and many responses were being given amidst considerable change and uncertainty. While the authors remain impressed with the internal consistency of the data and the extent to which the empirical findings have been validated in reviews with knowledgeable observers,⁴ the research

³ Fortunately for the survey exercise, the management of the former state and collective farms kept detailed records on all aspects of farm operations, and the rural committees are continuing this tradition. The fact that the director and farm economist on the former farms generally hold leadership positions on the present rural committees greatly facilitated data recall.

⁴ For example, the research findings were presented at a workshop (4–6 July 1995) for a group of 30–60 (depending on the day) international policy advisors and knowledgeable Kyrgyz public officials and observers. Aside from a few disagreements about the policy implications of the research findings, no objections to the results were raised. Instead, there was widespread agreement that the research adequately captures the nature of the farm restructuring process and current problems.

might have been more revealing, and certainly more stable, if the survey had been implemented one or two years in the future.

G. CHARACTERISTICS OF SURVEY SAMPLE

Due to time constraints, the field research was limited primarily to a 2-month period, April and May 1995. The research team administered the RC questionnaires to 47 rural committee heads and the EH questionnaire to 117 peasant farm enterprise heads, carried out in-depth case studies with 14 members of peasant farm enterprises, and conducted further in-depth interviews with 11 *rayon akims*.⁵

Selected characteristics of sample coverage are presented in table 5.1 for the RC survey and in table 5.2 for the EH survey. In the case of rural committee heads, between 5 and 12 rural committees were surveyed in each *oblast*, and the committees were nearly evenly split between former state and collective farms. In the majority of cases (62 percent), the head of the rural committee was interviewed, but the respondents also included the deputy head or the farm economist in 23 percent and 13 percent of the cases, respectively. In the case of the newly formed enterprises, a greater proportion were created out of former collective farms. Peasant farms (72 percent of overall sample) represented the most common model of reorganized farm investigated in the study, followed by private farms (15 percent) and agricultural cooperatives (12 percent).

TABLE 5.1 Sampling frame, rural committee head survey, 1995

Indicator variables	Kyrgyz Republic
Number of former collective and state farms interviewed by <i>oblast</i> :	
Djalal-Abad	5
Issyk-Kul	6
Naryn	6
Osh	12
Chui	12
Talas	6
Total sample size	47
Type of former farm in sample (%):	
Collective farm	54
State farm	44
Specialized	2
Current position of respondent (% of total sample):	
Head of rural committee	62
Deputy head	23
Farm economist of former enterprise	13
Other	2

⁵ In addition to these case studies, 20–30 other interviews were held with *rayon akims* and household members; however, these interviews did not achieve the status of formal case studies. See annex 4.1 for a summary of the points learned from the *rayon akim* interviews.

TABLE 5.2 Sampling frame, rural enterprise head survey, 1995

	Osh and Djalal- Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
Number of new farming enterprises sampled:	40	24	53	117
Type of former farm in sample (%):				
Collective farm	82	58	57	66
State farm	18	42	43	34
Type of new farming enterprise in sample (%):				
Peasant farm	75	67	72	72
Private farm	7	25	17	15
Cooperative	18	4	11	12
Association of peasant farms	0	4	0	1

III. PROFILE OF SAMPLE STATE AND COLLECTIVE FARMS

Before the restructuring process began in 1991, the average size of state and collective farms in the sample was quite large, over 20,000 hectares (table 5.3). The vast majority of this land was pasture; less than 14 percent was arable. Most farms had a modest fleet of trucks and large tractors as well as sizable livestock holdings, dominated by sheep and goats but also including horses, cattle (both dairy and beef), and, in some cases, hogs and yaks. The former farms supported an average population of over 6,500 individuals; of the working-age adults, over 80 percent were directly involved in farm production, with smaller numbers being employed either as social service workers (16 percent) or as administrators.

Whether the land endowment is sufficient to accommodate all vested interests, principally workers and their families from the former enterprise, is a key issue that will have an important influence on the ultimate success and pace of the land and agrarian reforms. Farm activities on smaller farming units are generally more labor intensive than on larger estates. Nevertheless, the last question reported in table 5.3 is not encouraging. Many of the rural committees interviewed indicated that the size of the work force on the former state or collective farm was excessive for the farm labor that the land could support. This problem is exacerbated by the government's National Land Fund (NLF) policy, which requires that each rural committee set aside 25 percent of arable holdings for future population growth or for outsiders who wish to acquire landholdings. The NLF policy thus curtails the supply of land to workers and residents on the former farm while, at the same time, the reform effort is increasing their demand for private landownership.

TABLE 5.3 Characteristics of former state and collective farming enterprises in sample prior to restructuring, rural committee head survey, 1995

Indicator variables	Kyrgyz Republic
Mean landholdings of former enterprise (ha):	20,335
Arable (n=47)	2,814
Hayfields (n=29)	703
Pasture (n=39)	16,178
Gardens (n=34)	76
Orchards (n=19)	257
Mean livestock holdings (no.):	
Sheep and goats	12,333
Cattle (beef)	815
Cattle (dairy)	613
Horses	359
Hogs	150
Yaks	59
Mean size of equipment fleet (number of vehicles):	
Tractors	53
Trucks	39
Mean size of population living on territory of former farm (persons): ^a	6,586
Of which,	
- Working age adults	2,496
- Children	2,928
- Pensioners	861
- Other	301
Occupation of working age adults (%):	
- Administration	3
- Farm production workers	81
- Social service workers (doctors, shopkeepers, teachers)	16
Percentage of respondents indicating that the work force was excessive for the farm work the land could support:	
Very excessive	31
Slightly excessive	16
About right	40
Slightly inadequate	11
Seriously inadequate	2
a. Maximum population: 24,500 persons; minimum: 770 persons.	

IV. ORGANIZATION OF RURAL COMMITTEES

Selected details on the structure and organization of rural committees are provided in table 5.4, and on the longevity and function of the committees, in table 5.5. Most rural committees were formed during the 1994 reform initiative (69 percent), though a few reportedly had been formed previously and a significant number (almost 24 percent) were not formed until 1995. Although the legislation requires a committee size of between three and seven individuals, many committees contain either fewer than three or more than seven. The vast majority of committee members are male, which is rather striking considering that women comprise a major component of the farm labor force and are equal recipients of land and property shares.

The predominant role of appointments (rather than elections) in determining rural committee membership is also worth noting. While regulations require that the director and deputy director be appointed by the district administration, there are no such requirements concerning other committee members. Although the rural committees may thus far have served an important function in implementing the reforms, the risk in the longer term is that appointments will act to entrench and perpetuate the power of the managers of former state and collective farms and their control over resource use within the region. This concern is underscored by the extensive planning functions mandated for the rural committee in government regulations, which place a high demand on the skills of former managers to implement the reforms. The tendency to carry over the power structure of the Soviet period seems evident already: over 69 percent of rural committee heads were directors of the former state or collective farm, while 84 percent of the deputy heads were either specialists or administrators on the farm prior to reorganization. If the rural committee is to continue to serve the greater public good, democratic processes of election should be expanded, and many of the duties of the rural committees should be transferred to the *rayon* administrations or eliminated (privatized) entirely.⁶

Because of the substantial responsibilities of the rural committee, it is rather surprising that almost one-third of rural committee members claim they receive no compensation for their work. There may be honor and pride associated with serving on the committee. Yet many of the tasks outlined in chapter 2 (section III.B)—subdividing land and property shares, managing the national land fund, monitoring and enforcing rational land use, regulating land and water use, considering grievances, reallocating land, keeping statistics on all economic activities, and overseeing the registration of newly formed enterprises—are so demanding that it is unreasonable and unrealistic to expect the committees to devote the necessary time simply out of goodwill. The most obvious long-term solution is to reduce or eliminate the degree of land-use planning and monitoring within the system so that only the most fundamentally required services are rendered. Another solution would be to shift true public service functions, such as

⁶ At the 4–6 July 1995 workshop in which research findings were presented to the government, one *rayon akim* strongly objected to such democratic processes. He felt, based on personal experience, that the *rayon akim* needed the power of appointment to eliminate bad managers on the rural committee so that reforms could move forward. However, while appointments might be desirable in the case of benevolent *rayon akims* who are good governors, they nonetheless can be used by other *rayon akims* to perpetuate local autocracies and personal power.

the recording of land maps and land transfers, the hearing of grievances, and the keeping of data, to local administrations, either to the *rayon* government or to rural councils. However, if rural committees still have a valuable role to play after these reallocations and eliminations have taken place, the Ministry of Agriculture and Food must pay their members accordingly. Otherwise, rural committees themselves will begin to seek funding solutions through charges and fees that risk compromising the coherency of the tax system in rural areas. There is already some evidence of this occurring.

**TABLE 5.4 Organization of the rural committee,
rural committee head survey, 1995**

Indicator variables	Kyrgyz Republic
Date rural committee was formed: (% of those formed, n=55)	
1991 - 1993	7
1994	69
1995	24
Size of rural committee (% of committees with):	
1-3 persons	29
4-6 persons	28
7-9 persons	28
Other (one committee with 16 persons, or not yet formed)	15
Percentage of members who are male:	
Director	98
Deputy director	90
All other members on committee are male	54
Percent of committees on which the following are appointed (versus elected):	
Director	69
Deputy director	80
All other members	71
Percent of heads who were directors of the former state or collective farm:	68
Position of deputy heads before being appointed or elected (%):	
Farm administration or technical specialist	84
Social service or farm worker	16
Percentage of rural committees whose members are paid (% yes):	68

Although the legislation specifies three-year terms for the rural committees, only 25 percent of the committees actually meet this requirement (table 5.5). The majority expect to occupy longer terms: about 60 percent of rural committee heads expect their committees to remain in effect until the “end” of reforms and/or indefinitely thereafter. In justifying the continuation of their committees, they claim there are a variety of services that the committee

is responsible for providing, including agribusiness services, land transfer coordination, farm management advice, and assisting with input supply. The failure of rural committees to adhere to legal requirements for committee termination and their perception of their roles as general managers in the agrarian sector reflect, first, a tendency to cling to the central planning mentality and, second, the slow development of the private sector, which should eventually come to replace the rural committees as the main provider of agricultural services.

**TABLE 5.5 Longevity and role of the rural committee,
rural committee head survey, 1995**

Indicator Variables	Kyrgyz Republic
How long are the terms (% of committees):	
3 years	25
5 years	4
Until end of the reforms	30
Indefinite	30
Uncertain	11
Percentage of respondents who feel the committee should be phased out after land and property shares are completely distributed:	38
Percent of rural committee heads who see the long term role(s) of the committee as: ^a	
Providing agribusiness services	69
Coordinating land transfers	55
Providing farm management advice	55
Assisting with input supply	45
Regulating irrigation water use and other	28
Other (including various combinations of the above)	7
Percentage of respondents feeling that input supply and marketing are best provided by the rural committee:	50
Most appropriate institution to hold land records and record land transfers (% of committees responding):	
Rural committee	47
Rural council	29
<i>Rayon</i> administration	16
Rural committee and <i>rayon</i> administration	7
Other	2
<p>a. Based on those respondents who feel the committee should not be phased out after land and property is distributed in prior question. Of those responding, 92 percent replied with two or more answers (roles).</p>	

Considerable confusion also exists as to which authority should hold land records and record land transfers. Nearly 47 percent of the respondents felt that such functions ought to be performed by the rural committee, 29 percent by the rural council, and 16 percent by the *rayon* administration, among other groupings. Either local authorities themselves have begun to compete for control over these functions, or duties are being relegated to those institutions with localized strengths in personnel, material, or finances. Ideally, one public entity supported by public tax revenues would control the land registration system, maintain the land cadastre and register, and record land transfers.

A number of specific recommendations seem sensible:

- R5.1 Local governance.** The roles and responsibilities of various government entities operating in rural areas, specifically the rural council, rural committee, and *rayon* administration, must be delineated to eliminate overlap and minimize confusion. This assessment should include an evaluation of public spending and should make sure institutions are allocated sufficient funds to be able to fulfill their responsibilities. Key concerns include land administration and registration.
- R5.2 Elections.** As far as possible, rural committee members should be elected by majority vote of farming households. This will empower farmers by giving them greater control over the decision-making process.
- R5.3 Financing rural committee expenditures.** Funding mechanisms must be devised for rural committee members so that their commitment to their work is not compromised (conditional on a review and rationalization of duties).
- R5.4 Rural committee's status.** The legal status, longevity, and termination procedures for rural committees need to be clarified and applied uniformly except in unusual cases.
- R5.5 Service cooperatives.** Provision of agribusiness services, farm management advice, and input supply are not appropriate public functions, but slow private market development continues to impede the supply of these services. Consideration should be given to converting rural committees to full-service farm cooperatives, which are the backbone of the rural farm economy in certain western economies (for example, the United States). Such a transition, however, will not be possible without fully democratic elections, a general cooperatives law, and development of a structure for incorporation and management.

V. LAND PRIVATIZATION

A. FARM RESTRUCTURING PROGRAM BETWEEN 1991 AND 1993

While any citizen of the Kyrgyz republic was theoretically eligible for land and property shares under the 1991–1993 reforms, conditions on land grants tended to favor those with capital and agricultural know-how (chapter 2, section II.B). Land grants were issued on a competitive basis, and preference was given to those judged to have more farm experience, higher qualifications, or greater management capabilities. While no explicit mention is made of minimum capital requirements in the rules and decrees, this was nonetheless an important factor in practice. Shareholders exiting the former state and collective farms were entitled to land and property shares based on years of experience with the farm. However, the field research indicates that a number of exiting enterprises either purchased additional land and property to complement their existing holdings or, because of the lumpiness of certain capital assets (buildings or machinery), paid for shares over and beyond the fraction to which they were entitled.

According to rural committee heads, roughly 45 percent of the former state and collective farms underwent some form of restructuring between 1991 and 1993 (table 5.6). The most common entities (in terms of number of farms) emerging from this restructuring were private farms, followed by peasant farms and peasant associations or cooperatives. Among state and collective farms divesting land to individual families, an average of 96 private farms were created, with an average of 4.8 hectares of irrigated land per farming unit. Where peasant farms were created, land was divested to 29 farming units with an average of 23.6 hectares of irrigated land per unit.⁷ Farms that “reorganized” into peasant associations or cooperatives essentially continued to function as state or collective farms: as the data show, only one such unit emerged from each of the state or collective farms that chose this form of reorganization. Although this unit might have been somewhat smaller than the former farm due to attrition (individuals or groups splitting off into private or peasant farms), it continued to operate as a collective. Average irrigated landholdings among these farms were high, over 400 hectares per unit.

It is also interesting to compare the irrigated-land-per-household figures for the three types of farm models. Cooperatives and peasant associations retained an average of 3.3 hectares of irrigated land per household. Peasant farms, on the other hand, received only 1.6 hectare of irrigated land per household, while private farms received 4.8 hectares on average. The relatively large size of private farms is easy to explain: such farms originated during the early stages of reform, mostly in 1991–1992, when individuals were allowed to request an unlimited amount of land from the state or collective farm and to farm this land separately. Often the individuals who could afford to do this were former managers, specialists, or administrators of the state or collective farm who had both the money and the connections necessary to operate individually in a collective economy.

⁷ Because the terms *peasant farm* and *private farm* have been redefined several times during the restructuring period (see footnote 2, chapter 3), it is quite possible that respondents may sometimes have confused the categories; the results should be interpreted accordingly.

**Table 5.6 Scope of 1991–1993 farm restructurings,
rural committee head survey, 1995**

Indicator variables	Kyrgyz Republic
Percent of farms which privatized some land in 1991 to 1993:	45
Mean area of irrigated land divested by former state/collective farm <i>in total</i> to (ha):	
Private farms (single family)	465.8
Peasant farms (multiple families)	693.9
Peasant associations or cooperatives	402.0
Mean area of irrigated land distributed <i>per enterprise</i> to (ha):	
Private farms (single family)	4.8
Peasant farms (multiple families)	23.6
Peasant associations or cooperatives	402.0
Mean area of irrigated land distributed <i>per household</i> to (ha):	
Private farms (single family)	4.8
Peasant farms (multiple families)	1.6
Peasant associations or cooperatives	3.3
Mean number of enterprises or units created (per former state or collective farm) out of reorganization:	
Private farms (single family)	96
Peasant farms (multiple families)	29
Peasant associations or cooperatives	1
Mean number of households per enterprise in:	
Private farms (single family)	1
Peasant farms (multiple families)	15
Peasant associations or cooperatives	122
Percent of enterprises who received larger land shares in 1991-1993 than allowed under the February 1994 decree who fear losing land:	19

The relationship between enterprise type and landholdings per household is much more difficult to explain when peasant farms are compared with cooperatives/associations of peasant farms, the latter appearing to have almost two times as much land as the former. The noticeably smaller land area per household in peasant farms remains constant throughout the reform period (see the comparable question in table 5.7). Although one can speculate about possible explanations—differences in land quality, mechanization status, location of farms to urban centers, differences in land use (irrigated grain versus labor-intensive vegetables), and a discriminatory bias by the former collective and state farm in giving land to peasant farms—the data are not sufficiently robust to discern actual causes.

Current regulations require that the shareholders of any farming unit which received larger land shares in the 1991–1993 restructuring than allowed by the February 1994 decree pay compensation to the rural committees equal to “the initial cost of a land use right,” and, if the pooled shares exceed the maximum farm-size limit, the farming unit is required to return the excess land to the rural committee for redistribution (chapter 2, section III.H). According to survey results and case-study interviews, households are not genuinely worried about the government’s enforcing such conditions, nor do local administrations appear to support this policy. Any attempt to enforce such regulations would seriously undermine the government’s credibility.

The farming community maintains that farms which split off from the state and collective farms in 1991–1992 have had a significant advantage over farms which were created later. Farmers who privatized early were eligible for farm machinery, spare parts, feed, farm chemicals, building timbers, fuel and lubricants, seeds, and gas and electricity from the state sector at wholesale prices set for the state and collective farms (chapter 2, section II.B). Such farms were also able to obtain 1–2 years of experience operating as separate enterprises before the state agricultural system began to deteriorate seriously in 1993. Lack of data precludes a comparison of the profitability of early and late reform enterprises, but based on case study interviews, the head start received by early reformers has given them a significant advantage in dealing with the present economic crisis.

B. FARM RESTRUCTURING PROGRAM IN 1994 AND 1995

Compared with the more sporadic farm reorganizations of 1991–1993, the 1994–1995 restructuring program has affected almost all of the former state and collective farms (table 5.7). While some critics argue that this restructuring has been largely superficial, involving name changes (for example, a state farm becomes an agricultural cooperative or an association of peasant farms) but little substantive reorganization, the data in table 5.7 do not bear this out. As in the 1991–1993 restructuring, quite a few private and peasant farms have emerged during the 1994–1995 reorganization. Moreover, the patterns of irrigated land distribution appear to be almost identical between the two periods. The mean number of enterprises created in each category, the number of households per enterprise, and the amount of irrigated land per household are all consistent from 1991 through 1995. This suggests that the farm restructuring process has been a great deal more stable during this period than popular opinion allows. The government’s tendency to issue decrees and large amounts of contradictory legislation has led to a great deal of unnecessary confusion and unwarranted concern over the instability of the reforms. In practice, the distribution of land shares appears to be progressing evenly over time.

**TABLE 5.7 Scope of 1994 and 1995 farm restructurings,
rural committee head survey, 1995**

Indicator variables	Kyrgyz Republic
Percent of sample farms which restructured in 1994 or 1995:	92
Mean area of irrigated land divested by former state/collective farm <i>in total</i> to (ha):	
Private farms (single family)	403.3
Peasant farms (multiple families)	976.0
Peasant associations or cooperatives	1209.3
National Land Fund	669.5
Mean area of irrigated land distributed <i>per enterprise</i> to (ha):	
Private farms (single family)	3.7
Peasant farms (multiple families)	24.4
Peasant associations or cooperatives	403.1
Mean area of irrigated land distributed <i>per household</i> to (ha):	
Private farms (single family)	3.7
Peasant farms (multiple families)	1.8
Peasant associations or cooperatives	4.0
Mean number of enterprises or units created (per former state or collective farm) out of reorganization in 1994 or 1995:	
Private farms (single family)	109
Peasant farms (multiple families)	40
Peasant associations or cooperatives	3
Mean number of households per enterprise in:	
Private farms (single family)	1
Peasant farms (multiple families)	13
Peasant associations or cooperatives	100
Percent of committees which gave land shares to the following:	
Administration, agricultural production workers, and pensioners	100
Service workers and children	98
Residents working off farm	87
Mean size of irrigated land shares received by the following (ha):	
Management and administrative staff	.73
Farm production workers and pensioners	.71
Service workers	.67
Children	.66
Residents working off farm	.53
Percent of coefficients (shares) that were the same for men as for women:	98
Reasons for creating a peasant farming enterprise (versus a private farm) (%):	
Pool equipment or expertise	34
Meet minimum farm size limits	13
Mixed (minimum farm size limits, credit, and/or pool equipment)	24
Instructed to do so by government or by decree	16
Gain access to credit	3
Pool equipment and gain access to credit	5
Other	5

It is clear that the current categorization system does not begin to express the wide variety of farm structures that have emerged in rural areas. By applying overly technical definitions, the present system creates artificial divisions between farm types in a way that hinders coherent debate on the restructuring process and provides little substantive information about the actual nature of the enterprises. Although in legal terms a private farm contains only one family, a number of private farms were visited that comprised multiple households, usually extended family or kin, that are not greatly different than peasant farms which are legally defined as multiple-family units.⁸ Peasant associations and cooperatives, on the other hand, are relatively similar, and according to many critics represent little more than a miniaturization of the former state or collective farm.

Returning to distribution issues, the reforms appear relatively egalitarian both in terms of land allocation to various classes of workers and in terms of gender. Every committee gave land shares to managers, agricultural production workers, and pensioners of the former enterprise. A high percentage of rural committees also gave land shares to service workers and children and even to residents working off the farm. Technically, however, even if all segments of the population received land shares, some groups could still receive larger land shares than others. While this occurred to a some degree, management and administrative staff, farm production workers, pensioners, service workers, and children all received between 0.66 and 0.73 ha/person on average. Only residents working off the farm received significantly smaller land shares. Furthermore, the vast majority of rural committees allocated identically sized land shares to both men and women.

Data in table 5.8, tabulated from the EH survey, give further details on the process of farm reorganization. Households have generally pooled shares voluntarily in forming an enterprise (78 percent of total sample), though the high percentage of missing values indicates that a significant number of restructurings are still in progress. The majority of households nationwide pooled the land shares of family and kin (52 percent), the land of households whose residences were similarly located (19 percent), or the shares of friends or members of the same neighborhood (16 percent). However, regional differences are apparent. Households in Naryn, Talas, and Issyk-Kul tended to pool shares among family and kin, while households in Osh and Djalal-Abad proved to be the most flexible in pooling the shares of nonrelated individuals (friends, members of the same neighborhood, or members of the same production unit).⁹

When land shares are distributed, households can choose with whom they would like to pool their shares. There appear to be a variety of constraints which determine the optimal number of households in any given enterprise. Enterprise heads indicated that they did not *exclude* more households because they needed to meet minimum size requirements, to pool equipment or expertise, or to accommodate all of their family and friends. In Osh and Djalal-Abad, where farms tend to be smaller, the need to pool equipment or expertise was the major

⁸ The State Inspectorate on Land Engineering reports data only for “peasant farms,” which include both private and peasant farms as legally defined, because of the difficulty in distinguishing the two farm types in practice (see chapter 3)

⁹ A similar question was addressed to the heads of rural committees with similar results: Extent to which families comprising peasant farms are related by birth or marriage (percent of national totals, Kyrgyzstan): entirely so (18 percent), mostly (53 percent), and somewhat to about one-half (29 percent).

factor cited by 42 percent of respondents, while in Chui *oblast*, the majority of peasant enterprise heads (72 percent) accepted extra households to meet minimum farm size limits imposed by the government.

TABLE 5.8 Process for pooling land shares, rural enterprise head survey, 1995

	Osh and Djalal-Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
Process households used to pool land shares (%):				
Voluntarily sought out other members	80	71	79	78
Lottery or administratively chosen	5	0	0	2
No response	15	29	21	20
If voluntary, the criteria used to join families (%):				
Family or kin	34	47	67	52
Land location relative to residence	13	23	21	19
Friends or members of same neighborhood	28	18	7	16
Members of same production unit	25	12	5	13
Why not fewer households pooled (%):				
Pooled shares to meet minimum farm size	29	72	30	38
Needed to pool equipment or expertise	42	7	21	25
Had to accommodate all family and friends	13	7	24	17
Families chosen proportional to equipment	8	7	3	6
Not applicable or no answer	8	7	22	14
Why not more households pooled (%):				
Numerous families too difficult to coordinate	63	88	50	61
Accommodated only family	21	0	17	15
Farm size could not exceed maximum limits	4	0	10	6
Families chosen proportional to equipment	4	6	8	6
Not applicable or no answer	8	6	15	12

Enterprise heads also said that they did not *include* more households simply because numerous families in the enterprise are difficult to coordinate or manage (61 percent), or because the enterprise wanted to accommodate family or kin, but no one else.

C. NATIONAL LAND FUND

As indicated in table 5.7, rural committees on average reserved 669.5 hectares for the national land fund. Given that the mean arable landholding of the former state and collective farms was 2,813.5 hectares, the percentage of land reserved (24 percent on average) is very close to the 25 percent required by regulation. The various survey approaches used were not sufficiently precise to determine the status of land use on and management of the NLF, but a significant

percentage (perhaps as much as 48 percent)¹⁰ appears to be either idle or farmed by the rural committee itself. It is possible, given the newness of the reforms, that many committees have not yet decided how to use or allocate this land. Nonetheless, there are important policy questions that remain unanswered—whether NLF land is continuing the legacy of state ownership over a sizable portion of the country’s irrigated land, whether certain committees are using such land to continue the de facto operation of the former state farm or collective, or whether overly bureaucratic rules governing land markets are causing excessive land transactions costs that are reducing private land access. Answers to these questions require further investigation, but the government policy of reserving NLF land for future population growth or allocation to agricultural entrepreneurs has a number of shortcomings.

First, there are serious concerns about the efficiency of the rural committee acting as lessor for NLF land. Little NLF land is presently being distributed on a long-term basis (only 7 of 47 rural committees in the survey had reassigned or redistributed NLF land, whereas 25 rural committees were renting such land) (table 5.9). The fact that rural committees must seek MAF approval for subdivisions and long-term lease issuances limits the discretion of the rural committee in land use and increases transactions costs in land market dealings (see chapter 2, section III.C). Although the duration of rental terms ranged from 1 to 49 years, by far the majority of rural committees are granting only one-year leases. The ability of the rural committee to negotiate promptly and to monitor such annual rentals is highly questionable. Families are capable of holding and managing land reserves to accommodate growth in their own households and, within the bounds of certain types of regulation,¹¹ the land market is a more efficient mechanism for redistributing land among households. The limited number of reassignments is perhaps understandable given the short time that has elapsed since the reforms began. Yet, if the number of assignments does not increase substantially within the next year or two, this should be taken as a clear indication that problems exist.

Second, there are serious concerns whether the rural committee can mobilize the capital resources necessary to maintain or improve land quality given the present liquidity crisis and budgetary shortfalls facing local authorities. Only 36 percent of the 25 rural committees renting-out land charged or collected monetary rent; cash rentals received average 529 *som*/hectare/year, but ranged from as little as 90 *som*/hectare/year to as much as 2,500 *som*/hectare/year.¹² It is thus difficult to envisage how the rural committee can cover the costs of land administration associated with annual rentals, let alone the resources required to improve or even maintain land quality.

¹⁰ Estimated from table 4.9 according to the formula: $[(7)(464) + (25)(471)] \div [(47)(670)]$.

¹¹ Adequate government monitoring and perhaps regulation to prevent land grabbing and land speculation or marketed-assisted land distribution to help the poor and disadvantage.

¹² An additional 9 (of 25) rural committees, or 36 percent, have allowed alternative arrangements for NLF land use, usually accepting a percentage of the harvest and/or payment of the land tax on the NLF plot in lieu of monetary rent. The remaining 7 (of 25) committees either are trying to figure out what appropriate rent to charge (3) or are not presently collecting rent (4).

TABLE 5.9 National land fund, rural committee head survey, 1995

Indicator variables	Kyrgyz Republic
Mean irrigated area set aside for National Land Fund (NLF) (ha): ^a	669.5
Number of rural committees in survey which set aside some NLF land (out of 47):	40
NLF land reassigned to farm enterprises: ^a	
Number of rural committees indicating some reassignment	7
Mean number of hectares reassigned by these committees, in total	463.7
Mean number of enterprises receiving land	17
Mean number of hectares reassigned per enterprise	27.3
NLF land being rented out: ^a	
Number of rural committees renting out land	25
Mean number of hectares rented out by these committees, in total	470.8
Mean number of enterprises renting land	14
Mean number of hectares rented per enterprise	33.6
Type of farming enterprise renting (%):	
Private farms	8
Peasant farms	32
Co-ops	36
Mixed	24
a. Area of land permanently assigned to enterprises and rented-out can exceed the mean area of NLF land set aside due to different population counts.	

Third, farmers do not have adequate incentives to invest labor or capital on land where they are assured access only to annual use rights. Rural committees have few incentives to invest in land improvements or resource conservation, since their future is uncertain and their revenue stream (from the rental market and taxes) is inadequate. This combination of low investment demand by farmers and weak financial capacity of rural committees bodes ill for long-term land improvements.

Fourth, the assignment of a large area of irrigated land to rural committees can act to justify and prolong their existence and entrench former managers. In view of the valuable nature of the land resource, local authorities will be inclined to retain skilled expertise knowledgeable in farm management; land-use planning; irrigation water distribution; maintenance and operation of communal orchards, windbreaks, watersheds, and the like. An erroneous but self-fulfilling cycle is perpetuated where centralized control over national fund land is thought to be needed, private landholders lacking secure rights fail to undertake “recommended” cropping practices and investments, and administrators observing poor land practices and weak investment demand justify the need for state oversight through the rural committee to regulate, allocate, and manage NFL land.

D. RECOMMENDATIONS

- R5.6 Farm models.** The present system of distinguishing farming units according to “private farm,” “peasant farm,” cooperative, association of peasant farms, collective, or state farm is confusing and fails to capture the rich variety of farm enterprises presently emerging. Based on rural appraisals, there is little de facto difference in the operation of a private versus a peasant farming enterprise. Peasant associations, cooperatives, and collectives are also nondistinct in practice. The present ambiguity in these definitions is leading to a muddled characterization of the agrarian structure. In the long run, data on area and number of farms by farm-size category would be appropriate for most policy uses. Further divisions between private, cooperative, and joint-stock companies would be useful. The effect of the current land policy’s forcing multiple households into farming units and miniaturizing former state and collective farms into peasant farms and associations inevitably creates the need for multiple legal corporate definitions. Removing these land policy distortions and rationalizing the system of farm categorization is possible and advised.¹³
- R5.7 Minimum limits on farm size.** Current administrative rules constrain optimal farm choice. Present size limits were set arbitrarily without due consideration given to allowable income targets or the dynamics of farm profitability created by the market. In general, as indicated in chapter 2, government-imposed size limits create land-use inefficiencies. Therefore, minimum farm-size limits should be eliminated immediately for all categories of farming operation. The data clearly indicate that farmers would choose more individualized farming arrangements if the minimum limit were eliminated and they could obtain farm machinery appropriate for individual use.¹⁴
- R5.8 Maximum limits on farm size.** At present, farmers are not particularly concerned about maximum farm-size limits. However, peasant enterprises are turning to the national land fund for land rentals to augment the size of their landholdings, and the maximum size limits may become more of an issue over time. During the transition, there is a risk that speculation in the land market and uneven distribution of resources will result in excessive land concentration. As time passes, however, this risk diminishes, and holding size can be indirectly regulated through a highly progressive land-taxation system. Thus the maximum farm-size limits should be increased (perhaps by 50 percent) to ensure that such limits do not constrain farm profitability while controlling for excessive land accumulation. However, such ceilings should have a well-defined closing date (five years); ideally, the ceilings should be terminated when the land market begins to value property at levels close to use value and after a progressive land-tax system becomes widely effective.

¹³ The new classification system introduced in January 1995 (see chapter 2, section III.I) eliminates the category of association of peasant farms, but definitional problems remain between private and peasant farms operating as individual farming units, or between peasant farm enterprises, agricultural cooperatives, and collectives, which all contain multiple households per farming unit.

¹⁴ Either through smaller equipment sizes, reintroduction of draft power, or expanded use of machinery rental services (for example, through full-service cooperatives or the private market.)

R5.9 National land fund. The government should set a clear date (preferably within the next five years) by which all NLF land will be permanently redistributed. Any land remaining in the fund after this date should be auctioned off. The government must set and advertise (particularly to people living outside the domain of the rural committee) clear guidelines for the redistribution. In order to ensure that demand for and supply of NLF land are relatively equal, the government should set minimum qualifications for bids and may wish to give priority to current residents.

R5.10 Government redistribution of excess land. Newly formed enterprises are generally unaware that they are legally subject to losing land if their land allocations exceed current farm-size limits. The success of a private market economy depends on the security of land rights. Even minor reversals by government resulting in land seizure may undermine future confidence in the government. Therefore, the Kyrgyz government should grandfather all land and property distributed in the 1991–1993 reforms, guaranteeing that the land will not be repossessed at any time in the future.

VI. CHARACTERISTICS OF NEWLY FORMED ENTERPRISES

A. POPULATION STRUCTURE

Because of differences in population density among *oblasts*, land shares per person are smaller in some *oblasts* than in others. Combined with farm-size limits stipulated in the land policy, this leads to considerable variation in membership size (number of households) among newly formed enterprises. While enterprises in Osh and Djalal-Abad, the two most populous *oblasts*, contain on average 391 individuals comprising 59 households, enterprises in Naryn, Talas, Issyk-Kul, and especially Chui *oblast* contain significantly smaller numbers of individuals and households (table 5.10). Despite these differences in population density, however, there appear to be little migration between *oblasts* and little entry into or exit from new enterprises. This is not surprising given the newness of the reforms. However, in time, as property rights are clarified, as land markets develop, and as economic opportunities become more diversified between *oblasts*, rates of migration and entry/exit will tend to rise followed by a corresponding increase in the demand for land transactions.

B. FARM SIZE AND LAND SHARE CHARACTERISTICS

The higher population densities in Osh and Djalal-Abad have also resulted in smaller farm sizes for newly formed enterprises in these regions than in other *oblasts* (table 5.11). Respondents in Chui *oblast* claimed not only overall farm sizes twice as large as those in Osh/Djalal-Abad, but also large tracts of pastureland, which is surprising considering that government regulations reserve ownership of all pastureland for the state. In general, democratic mechanisms (lottery and interhousehold negotiation) have been used to determine precise enterprise boundaries, but a significant number of such boundaries, especially in Chui *oblast*, have been set by administrative means, which again suggests that the old command structure and nondemocratic

mentality are still very much in place.¹⁵ While holding shares in two or more enterprises is theoretically feasible, over 94 percent (unreported data) of enterprises heads in all *oblasts* indicated that ownership in multiple enterprises was impossible, suggesting that stipulations of one farm per family in earlier decrees are still in force.

**TABLE 5.10 Characteristics of newly formed enterprises,
rural enterprise head survey, 1995**

	Osh and Djalal- Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
Number of households comprising new enterprise:	59	4	19	31
Population of new enterprise (mean no.):	391	20	98	180
Children	258	8	52	111
Adults (working age)	102	8	33	51
Pensioners	28	5	12	16
Others	4	0	2	2
Percent of households in enterprise that have resided in the area for at least 3 years:	100	96	96	96
Number of new people or households moving into the area now relative to the past (% rural committee heads saying):				
Higher or a lot higher	21	13	8	13
About the same	74	70	78	75
Lower or a lot lower	5	17	14	12
Percent of enterprises which have had families:				
- join the enterprise since inception	15	4	4	8
- exit the enterprise since inception	10	0	2	5

¹⁵ A similar question was asked of the heads of rural committees with similar results—what method was used for determining the precise location of each enterprise's irrigated land (% of rural committees): determined by lottery (41 percent); negotiated by family heads (19 percent); allocated by rural committee (26 percent); not yet determined (9 percent); length of service, auction, and other (6 percent).

**TABLE 5.11 Farm resources and boundaries of new enterprises,
rural enterprise head survey, 1995**

	Osh and Djalal- Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
Mean size of farm enterprise (ha): ^a	62.0 (35.0)	131.3 (90.0)	97.0 (48.8)	92.3 (52.7)
Of which, ^b Arable (ha)	56.9 (35.1)	130.2 (91.1)	48.1 (43.9)	68.1 (50.7)
Hayfields (ha)	8.8 (.61)	1.3 (1.3)	1.3 (1.3)	1.1 (1.1)
Orchards (ha)	1.2 (1.1)	0 (0)	0.1 (0.1)	0.46 (0.42)
Pasture	1.2 (0)	791.8 (0)	533.4 (0)	407.9 (0)
Method for determining location of private and peasant farms (%):				
Lottery	31	9	68	44
Negotiated among households	34	48	16	29
Administratively determined	28	43	16	25
First come, first serve	7	0	0	2
Percent of enterprises in which households know the precise location of land belonging to them:	82	83	75	79
Extent to which boundaries of household properties within enterprises are demarcated (%):				
Assigned by paper share only	19	23	18	19
Demarcated on map of farm	24	50	48	41
Measured on ground by tape/chain	16	18	6	12
Surveyed and marked with boundary markers	41	9	28	28
<p>a. Figures in parentheses are the area of irrigated land.</p> <p>b. These 3 categories do not generally account for all land held by the enterprise; furthermore, in some cases respondents double-counted the area in hayfields by including it also in the arable category. Thus the figures in these columns may not add up to the total enterprise size listed in the first row.</p>				

A surprisingly large number of individuals appear to know the precise location of their land within the enterprise. Furthermore, the formal surveying and marking of land shares seems to be progressing well, albeit with a great deal of regional variation. In Osh and Djalal-Abad, for example, over 40 percent of the rural enterprise heads interviewed indicated that their plots had in fact been surveyed and marked with boundary markers. In Chui, however, the figure is much smaller (only 9 percent), and a large number of respondents indicated that their shares have been assigned on paper only or drawn on a map of the farm with no formal survey taking place (see section VII.C, for more discussion).

**Table 5.12 Organization and characteristics of rural enterprise,
rural enterprise head survey, 1995**

	Osh and Djalal- Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
Age (years):	47	42	43	44
Total size of head's household (mean no. of individuals):	10	7	8	9
Gender (% male):	100	92	98	97
Highest level of education received (%):				
Middle school	23	46	41	36
Technical school or institute	33	25	19	25
University undergraduate degree	3	4	2	3
University graduate degree	41	25	38	36
Mean years worked for former farming enterprise:	21	17	18	19
Last position held in former farm (%):				
None	5	9	6	6
Administration	28	30	33	31
Technical specialist	20	26	39	30
Production worker	40	22	22	28
Social services	7	13	0	5
Leadership positions in the community (%):				
Rural council	13	4	13	11
Rural committee or <i>rayon</i> administration	13	12	6	9
Other	5	17	4	7
None	69	67	77	73
Nationality (%):				
Kyrgyz	83	79	94	87
Russian	0	4	4	3
Uzbek, Kazakh, other	17	17	2	10
Percentage of heads elected to position:	93	58	91	85
Process used to elect heads (%):				
Members of head's enterprise	62	57	75	68
Members of all production enterprises	22	14	23	21
Village voting population	16	29	2	11
Process for choosing new head upon head's retirement or death (%):				
Head will choose	18	23	11	16
Position rotates to another family	3	14	2	4
By election	79	63	83	78
Other	0	0	4	2

C. PERSONAL CHARACTERISTICS OF ENTERPRISE HEAD

The average new-enterprise head is a middle-aged, Kyrgyz male with a relatively high level of education (>36 percent hold university graduate degrees). Most of them worked on the former state or collective farm for many years (19 on average) prior to reorganization, and almost 61 percent were either administrators or technical specialists during that time. Since reorganization, few enterprise heads have maintained other leadership positions in the community, though some are members of either the rural committee or the rural council in their area (table 5.12).

According to national averages, about 85 percent of enterprise heads were elected to their current position by members of the enterprise or by members of all enterprises on the territory of the former state or collective farm. The democratic principles implied by this should be applauded and will lay a solid foundation for future reforms. However, it is again important to note regional variation: while more than 90 percent of enterprise heads were elected in Osh/Djalal-Abad and Naryn/Talas/Issyk-Kul, the figure drops significantly in Chui to only 58 percent, indicating a large number of appointments. Although there are valid reasons why appointments might occur, there is a risk that the bureaucratic structure of the Soviet period is being perpetuated through the reassignment of former officials and administrators to positions of power in the new enterprises.

D. DECISION-MAKING STRUCTURE

Enterprise heads generally have considerable decision-making power within the enterprise. According to regulations (chapter 2, section II.B), the head of the peasant farming enterprise is the person legally responsible for organizing production and marketing and for representing farm interests in dealings with the state, in matters of registration, in the negotiation of contracts, in property transactions, and in other legal activities that may apply. Because families have placed their pooled land shares under the head's control, the head has also acquired de facto power to authorize land transfers and to dictate the terms under which those transfers take place. Furthermore, while the majority of households claim to manage their own holdings individually within the enterprise, it is clear that the enterprise head makes many of the key management decisions for determining which crops are grown, how farm labor is allocated, and where and on what terms farm produce is marketed (table 5.13). Any inclination toward abuse of powers by the head may, however, be curbed by the democratic processes—election or rotation—which have been established for choosing new heads in about 80 percent of the enterprises interviewed.

More than one-third of enterprise heads indicated that they felt individual households within their enterprises are satisfied with the present property and decision-making arrangements of the enterprise. A few heads sensed a desire to return to some form of centralized management, while another 39 percent indicated that they feel pressure to increase individual ownership of land and/or individual control over land management. This pressure seems strongest in the Naryn/Talas/Issyk-Kul region. However, even those heads who would like to increase the degree of land privatization claim they are constrained by the inappropriate scale of mechanization and the small size of enterprise landholdings. Without a more

appropriate (that is, smaller and less expensive) scale of mechanization, or without machinery rental markets or cooperative management of machinery divorced from land, farmers will continue to experience difficulties in seeking private landownership.

TABLE 5.13 Land management decisions, rural enterprise head survey, 1995

	Osh and Djalal- Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
Percent of individual households which:				
Manage own holdings	48	91	49	57
Manage holdings cooperatively	45	9	45	38
Manage holdings as an association	7	0	6	5
Entity responsible for <i>planting</i> decisions (%):				
Enterprise head	67	65	69	68
Management of cooperative or association	21	5	17	15
Individual households	9	26	14	15
Rural committee	3	4	0	2
Entity responsible for <i>farm labor</i> decisions (%): ^a				
Enterprise head	73	80	72	74
Management of cooperative or association	15	0	16	12
Individual households	9	20	12	12
Rural committee	3	0	0	1
Percent of enterprise heads indicating their members would prefer:				
Present arrangements	43	45	31	39
Individual ownership of land	19	18	36	26
Centralized management	27	5	16	17
Greater control over management	3	9	4	5
Either individual ownership or greater control	8	23	13	13
If households would prefer another arrangement, what prevents them from doing it (%):				
Tractors too large/expensive for small holdings	67	54	75	68
Need large farm size for efficient management	30	38	15	24
Landholdings not delineated for household use	0	8	5	4
Instructed to do so and other	3	0	5	4
a. Another question—entity responsible for output sales decisions—generated nearly identical results.				

E. EMPLOYMENT DYNAMICS

As in the rural committee head questionnaire, many rural enterprise heads indicated that the size of their work force exceeds the work requirements of the enterprise's land (table 5.14). This feeling, not surprisingly, is especially pronounced in the most populous *oblasts*, Osh and Djalal-Abad, and indicates that privatization has done little to alleviate the population pressures

which were present on the former state and collective farms. Enhancing off-farm employment is one strategy to reduce excess labor, but most enterprises indicate either static or lower off-farm employment than in the past, and rates of full- or part-time off-farm employment are low across regions. It is perhaps not surprising, then, that only 17 percent of enterprises expect sizable out-migration of households in the near future. What is surprising, however, is that enterprise heads in the most densely populated areas anticipate the *least* future out-migration, suggesting stronger dependence on agriculture as a way of life in these regions.

**TABLE 5.14 Nonfarm employment opportunities,
rural enterprise head survey, 1995**

	Osh and Djalal- Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
Percent of adults employed off the farm:				
Full-time	2	6	5	3
Part-time	2	1	2	2
Dependence on off-farm employment relative to the past (% of enterprise heads responding):				
A lot higher	0	0	3	1
Higher	18	0	10	11
About the same	39	52	71	54
Lower	18	0	10	11
A lot lower	3	0	0	1
No response	22	48	7	22
Extent to which number of workers is excessive for the land available (% of enterprise heads responding):				
Very excessive	36	4	14	19
Slightly excessive	18	13	19	18
About right	41	75	61	57
Slight shortage	5	8	6	6
Percent of households expected to leave the enterprise in the near future due to lack of employment:				
None	59	42	38	46
Very few	10	33	11	15
Some	15	8	26	19
Many	8	17	25	17
No response	8	0	0	3

Problems of excess labor on farms and underemployment in the agricultural sector are endemic. However, should macroeconomic policy act to widen the urban-rural wage gap, households can be expected to depart enterprises in larger numbers and, with that event, will come important questions about the private transfer of land and property shares and forms of compensation.

F. RECOMMENDATIONS

- R5.11 Land surveying.** *Rayon* administrations' capacity to survey land and delineate property boundaries on the ground should be augmented. Present systems of demarcation by map and tape or chain will probably work well for the time being, but the need for clearer boundaries will grow as the land market develops. The cost of boundary delineation should be wholly or partly paid by private fees.
- R5.12 Democratic processes of land distribution.** For the most part, rural committees have used equitable and democratic processes for distributing land to peasant enterprises. Yet certain *oblasts* continue to rely heavily on administrative mechanisms. Such mechanisms should be discouraged since they will tend to promote excessive land-use planning and government controls.
- R5.13 Job creation.** *Rayon akims* in the course of interviews repeatedly pointed out the need for commercial investment that emphasizes value-added agricultural processing—cheese manufacturing, fruit preserving, sausages and meat processing, textile manufacturing, and the like. In time, the creation of such businesses will help increase farm incomes either through expansion of off-farm employment or through the consolidation of households within the enterprise due to exit. Beyond issues of local governance and the distribution of land and property shares, expansion of off-farm employment may be the most critical issue now faced in rural areas. Priority should be given to attracting foreign investment, focusing donor aid on the promotion of small-scale enterprises, granting credit subsidies for business creation, and eliminating bureaucratic red tape for business expansion.
- R5.14 Indivisible capital inputs.** Many former state and collective farms, even the most progressive in carrying out reforms, have not completed property share distributions; in many if not most cases, the intractability of subdividing lumpy capital inputs such as tractors is exacerbating privatization efforts. In many other countries in the world undergoing similar reforms, land shares have been kept strictly separate from property ownership. Frequently, property has been pooled and operated on a profit-making basis. Individual landholders rent equipment and property from the cooperative but earn profits as shareholders. Government programs should be developed that encourage if not stimulate similar organizational structures and forms of cooperative management. This would ease the difficulties associated with property share distribution and help conclude the current phase of the restructuring process.

VII. LANDOWNERSHIP AND BOUNDARY DEMARCATIONS

A. LAND RIGHTS

Both the rural committee heads and the heads of peasant enterprises were asked whether households within enterprises had the right to rent and sell land shares, and again for physical

land. Research findings for the rural committee survey are summarized in annex 5.2, while data for the enterprise head survey are provided in table 5.15. A comparison of the two tables indicates that similar answers were obtained from both sets of respondents.

TABLE 5.15 Land rights perceived by enterprise heads, rural enterprise head survey, 1995

	Osh and Djalal- Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
Percent of enterprises in which a household has the following rights without need of authorization:				
Rent out its land share	72	95	80	80
Rent out its physical land	67	84	74	73
Sell its land share	64	58	77	69
Sell its physical land	63	56	75	67
Percent of enterprises in which a household has the following rights, but requires authorization:				
Rent out its land share	26	0	18	17
Rent out its physical land	28	0	20	19
Sell its land share	28	5	15	18
Sell its physical land	29	0	15	17
Approval to sell a land share obtained from (%): ^a				
Head of enterprise	55	70	50	54
Rural committee	26	10	28	25
Other households in enterprise	3	10	17	11
<i>Rayon</i> officials	16	10	5	10
Restrictions on rental of shares (% heads saying): ^b				
Unrestricted, can rent to anyone	89	93	87	89
Priority given to other households in enterprise	8	0	4	5
Priority given to residents of area	3	7	9	6
Restrictions on sale of shares (% heads saying): ^c				
Unrestricted, can rent to anyone	88	91	83	86
Priority given to other households in enterprise	9	0	5	6
Priority given to residents of area	3	9	12	8
<p>a. Responses nearly the same for authorization to rent a land share, and rent and sell physical land.</p> <p>b. Responses nearly the same for restrictions on rental of physical land.</p> <p>c. Responses nearly the same for restrictions on sale of physical land.</p>				

In general, rural committees appear to treat actual physical land the same as land shares (see annex 5.2). The vast majority of rural committees permit farming enterprises to rent out land shares or physical land, but only half as many committees permit the sale of land and land shares, even with authorization.

Comparable data on land rights as perceived by enterprise heads are presented in table 5.15. Like rural committees, most enterprise heads allow members to rent out physical land and land shares. Unlike the rural committee heads, however, rural enterprise heads claim that their members can also *sell* land and land shares. Sixty-seven percent of enterprise heads said their members can sell physical land without authorization, and another 17 percent said sale is allowed with authorization. The sum (84 percent) is significantly greater than the 55 percent of rural committee heads who allow such rights. According to the general body of land law in Kyrgyzstan, local administrations control both land use and land transfers to a large extent.

This would suggest that rural enterprise heads are overestimating the rights of their enterprise members, especially in terms of sales. However, there is also a great deal of ambiguity in the law about which types of land transfers are allowed and which are restricted or prohibited. Rural enterprise heads, who may not be intimately familiar with the law, probably interpret the lack of direct prohibition of land and land-share sales as permission for such sales.

The transactions costs involved in a private land transfer will depend on the ambiguity of rights obtained by the acquirer in the transaction and the costs incurred in negotiating the contract, including formal and informal authorizations. Moreover, authorization may be benign requiring only that authorities be notified to a more formal process culminating in approval or rejection. Table 5.15 and annex 5.2 do not provide detailed data on the level of transactions costs experienced. They nevertheless point to two problems that increase such costs: the lack of certainty between rural committees and enterprise heads regarding which rights are actually held, as discussed above, and the intervention of multiple actors in restricting land rentals and sales via direct legal restrictions or their involvement in sanctioning or approving such transfers.

According to the regulations governing land-share transfers (chapter 2, section III.H), any household wishing to exit an enterprise must seek the approval of family members; that approval might mean, depending on the situation, only household members or members of all households within the enterprise (law on peasant farm enterprises; see chapter 2, section II.B). This bifurcation of powers and responsibilities over land transfers has resulted in considerable confusion on the ground. Rural committees, as indicated above, either believe private transfers are illegal or think their institution is responsible for authorizing transfers. When enterprises themselves were asked from whom authority must be obtained, the responses varied widely (percent of total sample) from head of enterprise (54 percent), to rural committee (25 percent), to other households in the enterprise (11 percent), to *rayon* officials (10 percent). Enterprise heads thus seem to believe that they themselves must give approval to exiting members, while rural committee heads claim that the committee must grant authorization.

Unlike the responses of the enterprise heads, above, which suggest a relatively unrestricted land market, a different picture was obtained from individual families in the course of the case-study interviews with households within enterprises. Families often expressed confusion and uncertainty over the delineation of rights between the enterprise head and themselves. Some interviewees asserted that enterprise heads hold too much veto power over land transfers.

Others indicated that individual rights to sell property or to exit and form a separate farming unit are overly compromised by the collective vote of other households within the enterprise.

Two general points stand out from this analysis. First, government fears about the adverse equity effects of land markets has led to hesitation and vacillation over legal land rights. As a result, rural committees, rural enterprise heads, and farming households are confused as to which rights are held by whom. Second, both restrictions on sales and requirements for authorization will impede the participation of outsiders in land transactions and thereby inhibit the development of the land market. Such restrictions, whether legally grounded or not, will bias land transfers toward inheritance, especially when combined with the natural hesitation of outsiders to join an enterprise comprised of relatives or the reluctance of a peasant farm to accept outsiders as shareholders.

B. LAND MARKETS

A priori, one might have expected the landholdings of peasant farming enterprises to have changed little in the short time since restructuring. However, nearly one-third of enterprises in the sample have acquired land since the time their farms were reorganized; in the densely populated *oblasts* of Osh and Djalal-Abad, this figure is 40 percent (table 5.16). Most of these enterprises acquired land through rental arrangements, through shareholders' joining the enterprise, or from the national land fund. Enterprises renting land have generally paid little or nothing for the privilege. Unfortunately, the limited number of cash rental transactions prohibited statistical analysis of beneficiaries of the rental revenue. But based on the limited amount of data obtained, the rural committee receives the rent from NLF land, while the enterprise head or all households within the enterprise receive the rental income from land owned by the enterprise. Based on these results, individual households appear to receive few of the private benefits of land rentals or sales. It is difficult to see how individuals can truly benefit from the land reform unless they are entitled to full private compensation. Rights to such benefits can be reinforced through legal reforms, but the elimination of minimum size limits would also help individual enterprises separate their holdings from the collective or peasant enterprise and achieve greater control over their land resource.

Few households see themselves selling land in the future. Many individuals (within enterprises) in the case studies declared that they intend to hold on to their land at all costs; no household interviewed appeared to want to sell its land shares or to engage in land speculation. These findings are further born out in table 5.16, which shows that few enterprises have disposed of land since the restructuring began, while one-third have acquired land. Hence, some of the concerns expressed in government about distressed sales seem to be exaggerated.

The high incidence of families related by birth and marriage will theoretically help reduce intrahousehold tensions, but such management forms will also offer outsiders little incentive to buy shares unless they, too, are kin or they are able to separate land from the rest of the enterprise. Because of the scarce supply of land in the domains of many rural committees, the land market for the foreseeable future will likely be dominated by land rentals and intergenerational inheritances. While it may be possible for a few well-connected individuals to

acquire large tracts of land, the vast majority will have difficulty doing so. The practical implication is that fears of land concentration or land grabbing leading to a highly unequal land distribution are probably unrealistic.

TABLE 5.16 Land transactions, rural enterprise head survey, 1995

	Osh and Djalal- Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
Percentage of enterprises having:				
Disposed of land since the restructuring	3	0	0	1
Acquired land since the restructuring	40	17	26	29
Principal mode of acquisition (% of cases):				
Rented-in land	44	25	42	40
Shareholders joined enterprise	6	0	33	16
Purchased land	0	0	0	0
No response	50	75	25	44
Land was primarily obtained from (% of cases):				
Shareholders	19	0	33	22
National land fund	37	0	33	31
Other enterprises	0	0	9	3
No response	44	100	25	44
Cash or barter received from transfer (% of cases):				
Barter	25	25	17	22
Cash	13	0	33	19
None	62	75	50	59

Overall, a number of general observations can be made about the role and importance of the land market. First, the land rental market appears to be playing a valuable role in matching the farm labor force and capital stocks of buildings and machinery with available land. Such efficiency might even be greater if it were not for minimum farm-size regulations that restrict the ability of households to downsize.

C. DEMARCATION OF BOUNDARIES AND PROCESSES FOR DETERMINING PARCEL LOCATION

Most rural committees (60 percent) indicated that households within enterprises have been issued "Certificates of the Right to Use a Land Share"; this shows that remarkable progress has been made in the first stage of documentation since the main restructuring initiative began in 1994 (table 5.17). Rural committee heads also claim that the exact location of land for individual families has already been determined in 80 percent of cases (79 percent in the case of rural enterprise heads, see table 5.11). This figure appears high, yet it was confirmed time and again in the case study interviews with individual households.

**TABLE 5.17 Delineation of property boundaries,
rural committee head survey, 1995**

Indicator variables	Kyrgyz Republic
Percent of individual families within peasant enterprises having been issued "Ownership Acts":	60
Percent of rural committee heads indicating that individual families within enterprises know the precise location of land belonging to them:	80
Extent to which property boundaries of peasant farming enterprises have been demarcated (% of cases):	
Assigned on paper only	3
Demarcated on cadastre map only	18
Measured on ground by tape or chain	13
Measured by a surveyor	66
Extent to which property boundaries of individual households within a peasant farming enterprise have been demarcated (% of cases):	
Unknown	16
Assigned on paper only	11
Demarcated on cadastre map only	18
Measured on ground by tape or chain	18
Measured by a surveyor	37
Land maps showing property boundaries are kept by (% of cases):	
Rural committee only	48
<i>Rayon</i> or <i>oblast</i> government	25
Both rural committee and local government	18
Rural council	7
Rural committee and rural council	2

However, even though households claim to know which piece of land belongs to them, in many cases the precise borders of the *enterprise* have not yet been formally surveyed, let alone the precise borders of individual parcels. Of the rural committees interviewed, 66 percent reported having formally surveyed the general boundaries of peasant enterprises with a surveyor on the ground; others have measured the boundaries of enterprises by tape or chain (13 percent); some have demarcated boundaries on a map only (18 percent); and 3 percent have failed to make any demarcation on the ground, that is, have assigned shares on paper only.

Far fewer boundaries of parcels held by individual households within the enterprise have been surveyed. According to rural committees, only about 37 percent of such internal boundaries have been formally surveyed on the ground by a surveyor, 18 percent by tape or chain, 18 percent on cadastre maps, and 11 percent on paper only. In the remaining 16 percent of cases the rural committees did not know whether boundaries had been demarcated for individual households within the enterprise, suggesting that no boundaries of any sort have yet

been drawn. Based on the earlier analysis of rural enterprise heads' responses to this same question (in table 5.11), it would appear that rural committee heads have overestimated the extent to which boundaries of individual properties have been demarcated: 28 percent of these boundaries have been formally surveyed on the ground and 12 percent by tape or chain, while 41 percent have been identified on maps only and 19 percent exist merely as paper shares. Of the land maps that have been drawn, many are currently held by the rural committees (48 percent), but such maps are also held by various other public institutions at the local level.

Two important policy questions thus become apparent: What appropriate policy reforms are needed to increase the legal certainty of property rights corresponding to household ownership of land parcels on the ground? Which institutional reforms are needed in survey, land mapping and land records that create a coherent and rational land-administration system?

D. RECOMMENDATIONS

R5.15 Land markets. For the sake of economic efficiency, the government should take steps to strengthen rather than constrain the nascent land market. Specifically, the government should eliminate minimum farm-size limits so that households can separate at will from collectives or peasant farm enterprises; it should limit the interference of the *rayon* government or rural committee (and government generally) in land market regulation; it should distribute land from the national land fund so that rentals and sales are handled efficiently by the private market; it should specify through legislation the rights of lessees and lessors; it should limit the powers of the peasant enterprise head in authorizing or controlling transfers; it should remove priorities of rental or sale of household land to the enterprise head or other members within the enterprise; and it should accelerate the formal surveying and registration of individual household land.

R5.16 Mortgages. The current restrictions on the sale of land and the difficulties faced by outsiders who wish to buy into an enterprise will depress land prices for many years to come. The mortgage value of land is also likely to be low given the tenuous nature of farm profitability. While expansion of mortgages is an appropriate goal for the long term, financial mechanisms in the short to intermediate terms will need to stress other forms of guarantees, such as group guarantees, credit funneled through marketing agents, cash reserves, and subsidized government credit. The rural committee, if removed of many of its present responsibilities (land use monitoring, land record keeping, map keeping), which are more appropriately carried out by the *rayon* administration, could play an important role in facilitating agribusiness services and guaranteeing group credit. Converting the rural committees to full service cooperatives, as recommended earlier, would serve this function.

VIII. PROPERTY PRIVATIZATION

A. STATUS OF PROPERTY DISTRIBUTION

Although the majority of farms have carried out property valuations (table 5.18), actual distribution of property shares to newly formed enterprises has lagged. Distribution of indivisible inputs, such as buildings and tractors, has proceeded especially slowly, while distribution of livestock, a more divisible asset, has progressed only slightly faster. Of the newly formed enterprises that have received property, 68 percent now manage their livestock individually while keeping “lumpy” assets (tractors and buildings) under communal management. Surprisingly, 50 percent of rural committee heads indicated that property shares will be allocated not just to workers on the basis of their labor contribution over the past ten years as the legislation specifies, but to all members of the former state or collective farm.

TABLE 5.18 Status of property reorganization by rural committees, rural committee head survey, 1995

Indicator variables	Kyrgyz Republic
Percent of former state and collective farms in sample which have assessed the value of the property which remained on the farm	72
Percent of former farms in sample which have fully distributed property to members: ^a	
Livestock	40 (4)
Tractors and machinery	36 (4)
Buildings (shops, barns, dairy parlors)	34 (6)
Percent of rural committees indicating that divested property is now individually (as opposed to communally) managed:	
Livestock	68
Tractors	16
Buildings	16
Percent of former farms allocating property shares to:	
Workers only	50
All family	46
Adults only	4
a. Figures in parentheses indicate percent of former farms where distribution is still in progress.	

B. LIVESTOCK

Changes in livestock numbers since the beginning of the reforms are reported from two different perspectives—rural committee heads, who report data on numbers of livestock on the territories of the former farms prior to restructuring versus those held by newly formed

enterprises at present (table 5.19); and changes in livestock holdings reported by the newly formed enterprises between the time they received livestock and the present (table 5.20).

According to the rural committees (table 5.19), sizable changes in livestock numbers have been experienced; large reductions have occurred among sheep and goats, beef cattle, and hogs; dairy cattle have remained more or less the same while horses have increased slightly in number. According to one official interviewed, the decline stems from former farm officials and administrators appropriating large numbers of animals for themselves during the first stages of the reforms. Rural committee heads, however, claimed that livestock were sold to pay workers, farm expenses, and/or farm debt, or because of inadequate feed supply. Only 13 percent suggested the livestock might have been sold for personal gain.

**TABLE 5.19 Changes in livestock numbers,
rural committee head survey, 1995**

Indicator variables	Kyrgyz Republic
Mean number of livestock holdings on former state or collective farm:	
Sheep and Goats	12,333
Cattle (beef)	815
Cattle (dairy)	613
Horses	359
Hogs	150
Mean number presently held by landholders associated with the former enterprise:	
Sheep and Goats	7,459
Cattle (beef)	585
Cattle (dairy)	594
Horses	386
Hogs	56
Reasons for the reduction in livestock numbers (% saying):	
Forced sale to pay workers	28
Forced sale to pay farm expenses	25
Inadequate feed supply	18
Forced sale to pay back farm debt	10
Animals sold before restructuring or sold for personal gain	13
Other	5

Based on information gathered from the heads of newly formed enterprises (table 5.20), both the initial distribution of livestock and changes in livestock numbers have varied significantly across regions. The vast majority of animals distributed in all *oblasts* were sheep and goats, followed distantly by horses and then cattle. However, newly formed enterprises in Chui received far fewer animals on average than their counterparts in Naryn/Talas/Issyk-Kul and even in Osh/Djalal-Abad, despite the very high population density of the latter region. Horses and dairy cattle have increased slightly in number since the redistribution; sheep and

goat herds have declined, but significantly more so in Djalal-Abad, Osh, and Chui. The reasons offered for declining livestock herds (where applicable) vary widely, ranging from lack of profitability, to inadequate feed supplies, to butchered or sold for capital, to need for cash to pay for farm expenses or debt.

TABLE 5.20 Livestock holdings by newly formed enterprises, rural enterprise head survey, 1995

	Osh and Djalal-Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
Mean number of livestock received as part of the restructuring (presently owned in parentheses):				
Cattle (beef)	4.2 (1.2)	.2 (.3)	.3 (2.0)	1.7 (1.4)
Cattle (dairy)	2.0 (2.9)	1.9 (4.3)	1.6 (4.2)	1.8 (3.8)
Horses	2.7 (3.0)	.7 (1.5)	8.7 (10.1)	5.1 (5.9)
Sheep and goats	66.7 (29.6)	17.9 (4.7)	378.0 (334.3)	196.8 (163.8)
Reason for decline in livestock numbers (%):				
Livestock not profitable	0	0	41	26
Inadequate feed supply	17	0	29	22
Butchered or sold for capital	33	100	0	22
Sold to pay farm expenses or debt	17	0	24	19
Butchered for food or social events	33	0	6	11
Livestock communally/individually managed (%):				
Individually	52	21	44	43
By enterprise	18	0	12	13
Mixed or other	0	21	15	10
Not applicable / no answer	30	58	29	34

Thus, in the case where livestock numbers have declined, two sets of factors seem to be at play. First, prior to divestiture, the management of former enterprises sold livestock to cover farm expenses and pay debt; in some cases management simply absconded with livestock or funds. Second, after the divestiture, animals were sold because of depressed farm prices (no doubt related to the first set of factors prior to restructuring) or to cover farm expenses or debt, or butchered for social events.

Of the present herds, most appear to be managed either by individual families or by the newly formed enterprises, though many respondents had received no livestock under the reorganization or were simply unclear as to how their herds were now going to be managed. Thus a discrepancy appears to exist between the rural committee data (table 5.18), which shows that 68 percent of enterprises receiving livestock shares are now managing their animals individually, and the rural enterprise data, which puts this figure at only 43 percent. However,

if the 34 percent of respondents who did not answer the question in the rural enterprise head survey are eliminated on the assumption that they received no livestock from the property distribution, then the number of rural enterprise heads reporting individual management climbs to 66 percent, which is very close to the number estimated by the rural committee heads.

C. BUILDINGS AND ORCHARDS

A relatively small number of enterprises (about one-fifth on average across the Kyrgyz Republic) received buildings as part of their property share during the redistribution, and even fewer received orchards (table 5.21). While the buildings thus redistributed tend to be individually managed, however, orchards remain under collective control to a greater extent.

TABLE 5.21 Management of buildings and orchards, rural enterprise head survey, 1995

	Osh and Djalal- Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
Percent of enterprises that received property:				
Buildings	40	21	19	22
Orchards	18	0	6	9
Buildings managed privately or collectively (%): ^a				
Collectively	20	0	50	27
Individually by enterprise	73	100	40	67
Don't know	7	0	10	6
Orchards managed privately or collectively (%): ^a				
Collectively	57	0	33	50
Individually by enterprise	43	0	67	50
Percent of enterprises distributing cooperative benefits from buildings in the form of:				
Wages	13	0	0	7
Dividends	20	0	0	10
Output share	47	20	50	43
Don't know	20	80	50	40
Percent of enterprises distributing cooperative benefits from orchards in the form of:				
Wages	14	0	0	10
Dividends	14	0	0	10
Output share	57	0	100	70
Don't know	15	0	0	10
Enterprise distributes orchards' benefits to (%):				
Workers involved	43	0	33	40
All households within enterprise	43	0	67	50
No response	14	0	0	10
a. Individually by enterprise or collectively with other enterprises.				

Many of the enterprises receiving buildings and/or orchards remain unclear as to how the benefits from these assets will be distributed both within and between (in the case of cooperative management) enterprises. The difficulty of managing large buildings built for a highly centralized agricultural system is understandable and uncertainties over how to divide benefits are to be expected. The limited information available suggests enterprises are being very adaptive and flexible in their approach.

D. EQUIPMENT AND MACHINERY

Because of the problems rural committees have experienced in redistributing indivisible assets, mentioned earlier, and the modest overall quantity of tractors, trucks, and other farm equipment held by the former state and collective farms, it is not surprising so many newly formed enterprises received little such equipment during the restructuring (table 5.22).

TABLE 5.22 Stock of tractors and machinery on new enterprises, rural enterprise head survey, 1995

	Osh and Djalal- Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
Number of workable vehicles received as part of restructuring (versus presently in parentheses):				
Tractors	1.6 (1.6)	.2 (.1)	1.8 (1.6)	1.3 (1.2)
Trucks	1.2 (1.0)	.1 (.1)	1.6 (1.3)	1.0 (.8)
Grain combine or picker	.1 (.1)	0 (0)	0.5 (0.3)	.2 (.1)
Useful life assuming spare parts:				
Tractors	3.2	.1	2.0	2.2
Trucks	2.8	.1	1.6	2.1
Grain combine or picker	3.8	0	4.5	4.1
Tractor fleet owned is sufficient to farm all land currently held (% yes):	3	13	4	6
Strategy will pursue, if fleet is inadequate (%):				
Try to rent tractor services	59	60	71	65
Rent out land	10	25	9	13
Buy more equipment	17	0	9	10
Revert to horse power	7	5	2	4
Other or not sure	7	10	9	8

Moreover, further reductions in the number of workable farm vehicles have occurred since the reorganization, and the useful life of the remaining equipment, even assuming the availability of spare parts, is very low. For almost 94 percent of enterprises nationally, the current stock of tractors is insufficient to farm all of the land held. Enterprises in response are resorting to a variety of alternatives to obtain the equipment that they need. The predominant strategy for

alleviating mechanization constraints appears to be tractor rental. This suggests a strong potential demand for tractor rental services, yet the capacity of the market to provide such services on a large scale is questionable due to capital constraints and illiquidity in the capital and commodity subsectors. Some enterprises also anticipate renting out their land as a means of alleviating mechanization constraints, a strategy which demonstrates the flexibility that a land market gives to enterprises in adjusting resource levels to market conditions.

E. DEBT AND TAXATION

According to current legislation, most of the remaining debt of the former state and collective farms (50 percent of the former's debts and 75 percent of the latter's) will be distributed by the rural committee to the newly formed enterprises to be paid back over a fifteen-year period beginning 1 January 1997. The remaining 50 percent/25 percent of the debt will be written off by the government. As seen in table 4.23, the average debt owed (1.7 million *som*) by the rural committees (who currently hold all the debt of the former state and collective farms) at the end of 1994 is considerable and nearly five times greater than their accounts receivable (359,882 *som*); the former figure is partially skewed upward by the accrued interest that has accumulated from high nominal interest rates in recent years.¹⁶ Most of this money is owed to banks, fuel and energy providers, and the government. Considering that most had a sizable amount owed to them by other debtors (principally small enterprises, cooperatives, and processors) at the time of the restructuring, the writing off a portion of the debt seems fair and justified compensation. There nonetheless remains a great deal of confusion as to who is ultimately responsible for paying the debt: about half the rural committee heads feel that the newly formed enterprises should be responsible for the repayment, while the remainder feel it is the responsibility of the rural committee.

There has been some debate as to whether the proposed plan of distributing old debts to newly formed enterprises is sensible; another alternative would be to assign the debt to the *rayon* administration, which could then recoup those debts through the tax system. On the other hand, it is unreasonable for enterprises to expect free land and property (they currently pay nothing for their land shares and only sometimes pay for property shares) and to expect to be exempt from debt and debt servicing as well. With the current high rate of inflation, however, and with the emergence of a scissors phenomenon (rapidly increasing input costs and stagnant or declining commodity prices) in the agricultural sector, placing a heavy debt burden on newly formed enterprises may undermine their economic viability during the early stages of reform, when confidence in privatization is most needed. If the government wishes to proceed with the current plan of assigning debt to the enterprises rather than instituting land and property share fees and reassigning the debt to the *rayon* administration, then it should make sure that the interest rate assigned to enterprises is low enough and the grace period long enough to allow the enterprises and reforms to get off to a healthy start. Fortunately, present

¹⁶ In the case of one former state farm, credit to the farm came to a halt in 1993. Cash receipts from the farm's operations, after paying for salaries and farm inputs, left no funds remaining for credit payback. The farm debt nonetheless continued to accrue interest, at the rate of 50 percent at the beginning of 1993, and reaching as high as 393 percent by June 1994. Of the farm's present debt load (617,000 *som* in February 1995), 70 percent is estimated to be accrued interest.

methods used to prorate debt to the newly formed enterprises appear sensible and indicate that rural committees may already be adapting policy to local conditions.

TABLE 5.23 Debt and taxation, rural committee head survey, 1995

Indicator variables	Kyrgyz Republic
Mean credit owed <i>by</i> the rural committee (in <i>som</i>) at the end of 1994:	1,704,428
Mean debt owed <i>to</i> the rural committee (in <i>som</i>) at the end of 1994:	359,882
Percent of rural committees responding who listed one of their principal creditors as (multiple responses possible): ^a	
Bank	77
Fuel and energy providers	32
Ministry of Agriculture or Government	26
Taxes	19
Social fund, input suppliers, pension fund	12
Percent of rural committees responding who listed one of their principal debtor(s) as (multiple responses possible): ^b	
Small enterprises or coops	57
Processors	39
Other	34
Entity responsible for paying remaining debt (% claiming):	
New enterprises	48
Rural committee	46
Other (including <i>rayon</i> administration)	6
If new enterprises, how will the debt be distributed (% claiming):	
According to land shares	67
According to earnings	19
According to population	9
According to property share	5
a. Twelve respondents (out of 47) listed no creditors.	
b. Eighteen respondents (out of 47) listed no debtors.	

F. RECOMMENDATIONS

R5.17 Acceleration of property distribution. The process of property distribution must be accelerated. For livestock, an effort must be made to distribute as many animals as possible before they can be siphoned off by parties from the former state and collective farm. For equipment and buildings, three options should be considered: (1) pooling buildings and machinery into cooperatives (households must pay for services, but as shareholders they reap the profits); (2) privatizing equipment to one or more peasant farming enterprises; and/or (3) temporarily subsidizing the creation of mechanized rental services. Option 1 seems the most viable at this stage of the restructuring.

R5.18 Pastureland. According to the regulations, grazing land in the Kyrgyz Republic is a common resource and is, therefore, exempt from land-share distributions. Thus far in the restructuring period the absence of clear rights and responsibilities governing the use of pasturelands has not been overly problematic because of the significant reductions in herd sizes that have taken place since 1991. However, it would be unrealistic and unwise to ignore the potential dampening effect of 70 years of central planning on the evolution or reintroduction of customary grazing rules. The most practical advice at present might simply be to undertake studied observation of grazing rates and forms of tenure emerging in mountainous areas, in recognition that overgrazing problems and grazing conflicts are a risk. Wholesale privatization of pastureland is both unnecessary and impractical for the time being, yet it does seem sensible to give *rayon* administrations the autonomy to demarcate pastureland on a case-by-case basis.

IX. SEVERITY OF AGRICULTURAL PROBLEMS

Both the rural committee heads and the rural enterprise heads were asked to rank the seriousness of eleven agricultural problems on a five-point scale, from not serious to extremely serious. The responses of rural committee heads are presented in table 5.24, and for the heads of newly formed enterprises, in annex 5.3.

TABLE 5.24 Severity of agricultural problems, rural committee head survey, 1995

	Problem is not serious (%)	Problem is somewhat serious (%)	Problem is serious (%)	Problem is very serious (%)	Problem is extremely serious (%)
Slow progress on demarcating and documenting land rights of households within enterprises	59	16	5	14	7
Slow progress on demarcating and documenting land rights of peasant farming enterprises	57	15	7	13	9
Lack of knowledge on how to farm	48	26	7	11	9
Irrigation water distribution	20	24	28	15	13
Lack of farm extension or veterinary advice or service	13	4	33	16	33
Lack of seeds	26	20	20	22	13
Lack of markets for farm output	7	9	24	17	44
Lack of credit	7	7	20	17	50
Lack of fertilizer and farm chemicals	4	7	13	26	50
Lack of fuel	0	7	13	15	65
Lack of spare parts or equipment	0	2	11	13	74

The most severe problems in the agricultural sector—lack of markets, credit, farm chemicals, fuel, and spare parts and equipment—stem from macroeconomic factors. While these problems in the agrarian sector are pressing, there appears to be a sense that the actual reorganization process has proceeded well and that no overwhelming problems have yet emerged. The demarcation of property boundaries and the documentation of land rights of peasant farming enterprises and individual households are considered relatively minor problems at present. But as macroeconomic problems ease and as farmers become better acquainted with the meaning of true property ownership, such problems will become increasingly important. For the time being, the fact that farmers are not particularly concerned with problems of land rights suggests that the government has a large window of opportunity in which to design and implement a land registration program. However, since this window will narrow rapidly as markets develop and as the other macroeconomic problems (credit, input supplies, equipment availability) are solved, the government would be well advised to begin on a pilot basis the design and testing of new registration system program as soon as possible.

X. ASSESSMENT OF FARM RESTRUCTURING TO DATE

Overall, both farm enterprise heads and rural committee heads appear relatively pleased with the reforms to date (tables 5.25 and 5.26, and annex 5.4). The main explanations given for this satisfaction include greater independence, greater individual control over resources and destiny, and greater private benefits for work expended. Social service workers and pensioners, whose economic positions have been somewhat undermined by the reforms, seem less positive about the restructuring. Those displeased with the reforms tend to blame macroeconomic factors beyond the scope of farm restructuring. However, especially among the rural enterprise heads, there is a sense that the reforms are proceeding too slowly. Not unexpectedly, very few heads of the rural committees, which are responsible for implementing the reforms, admitted that the pace of reform is not as fast as it could be.

Clearly a variety of problems continues to challenge the agricultural sector. Past livestock liquidations have depleted the capital stock and wealth of many households. Tight liquidity is hampering purchasing power, while the slow development of private markets has hampered the supply of farm inputs and marketing outlets. Newly formed enterprises and the remnants of former collective farms have excess labor endowments that risk seriously prolonging under- or unemployment. Newly formed enterprises have not yet reached their optimal farm size, due partially to government farm-size restrictions that have curbed downsizing; uncertainty and instability will continue to heavily influence decisions in the intermediate planning horizon. Landownership and transfer rights are insecure and of inadequate duration, particularly for individual households within collectives or comprising peasant farms. Diseconomies in scale of buildings and equipment are hampering the privatization of property. The fate of property rights in as much as 25 percent of privatized land (national land fund) remain unclear and uncertain, as do the appropriate roles and longevity of local institutions—*rayon* governments, rural councils, rural committees, agrocombinats, and centers for land and agrarian reforms.

TABLE 5.25 Assessment of farm restructuring to date, rural committee head survey, 1995

	Very pleased (%)	Pleased (%)	Indifferent (%)	Dissatisfied (%)	Very dissatisfied (%)
Former production workers	4	56	9	27	4
Rural committee head	9	50	9	28	4
Former farm specialists or managers	7	51	4	36	2
Former service workers	4	42	13	38	2
Pensioners	4	33	22	38	2

TABLE 5.26 Reasons for satisfaction or dissatisfaction with farm restructuring, rural committee head survey, 1995

Indicator variables	Kyrgyz Republic
Most important reasons why certain groups are pleased or very pleased with the reforms (% of respondents):	
People get land	28
People are independent	26
Labor efficiency or productivity is improved	14
Higher farm income	7
People directly benefit from the fruits of their labor	2
Able to market own products	2
Other	21
Most important reasons why certain groups are dissatisfied or very dissatisfied with the reforms (% of respondents):	
No machinery/fuel	20
Economic hardships	17
No credit	15
People not yet ready for the reforms	7
No markets for products	7
No taxes are generated	5
No wages for social workers	5
Slow pace of reform	2
No help from government	2
Other	20

On the other hand, a number of elements of the restructuring have progressed remarkably well:

- ◆ Land distribution has been fairly equitable: all inhabitants of former farms have received land, and distribution has been relatively equal across occupations and gender.
- ◆ The identification and documentation of individual land shares is well advanced: most inhabitants of the former state or collective farm have legal documents guaranteeing their land share, and a large majority of them know the actual location of their land within the newly formed enterprise to which they belong.
- ◆ The demarcation of enterprise boundaries has been proceeding rapidly: many rural enterprises have already had a formal survey conducted to determine the precise boundaries of their land. This is a key step in the development of a land market.
- ◆ Democratic tendencies are clearly evident in a number of areas: in the election of enterprise heads, in the assignment of land to specific enterprises, and in the determination of precise boundaries between enterprises.

All of these factors suggest that substantial progress has been made in the last five years toward restructuring the agricultural sector. Perhaps the most important factor at this point of the restructuring program, however, is that popular opinion favors the reforms and continued privatization. Contrary to the pessimism that seems to pervade all levels of government, there is widespread satisfaction in the countryside with the pace and scale of reforms. The major stumbling blocks lie not with the land reforms and privatization per se, but with the way the reforms have been sequenced (land reform before solid macroeconomic fundamentals were in place) and the macroeconomic problems that are currently exacerbating problems of low farm profitability. Unless substantial headway is made in increasing rural incomes and in broadening and documenting the scope of individual land and property rights in the not too distant future, there is considerable risk that local support for the reforms will wane. Once this process of attrition starts, it will become very difficult politically to maintain any future momentum in land or property privatization.

ANNEX 5.1
GENERAL RAYON AKIM OBSERVATIONS,
RAYON AKIM INTERVIEWS, 1995

- ◆ **Reform procedures.** One major improvement in the 1994 reforms over previous initiatives was that clear procedures were provided for *rayon* administrations to follow, which made implementation much easier.
- ◆ **Akim roles.** Most *akims* perceive their main task to be promoting private ownership and discouraging collective ownership. Some *akims* in addition feel they are responsible for providing technical advice to farmers and assisting them with input supply and marketing.
- ◆ **Private ownership.** As implied above, most *akims* interviewed favor private landownership or at least lengthening the 49-year lease.
- ◆ **Farm-size limits.** Many *akims* do not agree with the present minimum and maximum farm-size limits because these limits fail to take into account regional differences in climate, soils, and production systems.
- ◆ **National policy.** *Akims* would like to have more influence over policy development since they are ultimately charged with implementing policy and, moreover, are best informed about the practicality of various options.
- ◆ **National land fund.** Views on the national land fund vary significantly: some are happy with the current system of renting-out land to private farmers, some would like to use it to increase land shares, and some prefer to reserve it for future population growth.
- ◆ **Surveys and registration procedures.** Land surveys are conducted sometimes by the rural committee and sometimes by the land survey service of the *rayon*. *Akims* emphasize that survey procedures need to be standardized and that surveyors should be certified professionals. Procedures for acquiring and registering land seem complicated—any transaction must be registered with the land commission, the tax inspectorate, and the statistical committee, and then must be notarized by the *rayon* notary service.
- ◆ **Tax revenues.** Some *akims* claim that the reforms have led to lower tax revenues. The emergence of a large number of small enterprises engaged in subsistence production is reducing (or is expected to reduce) revenues collected. In most *rayons*, 80–90 percent of tax revenue has been generated from agriculture in the past. Thus significant reductions in revenues collected from this sector are making it difficult to pay for social services. *Akims* want to attract more value-added processing to their *rayons* to increase the revenue base.
- ◆ **Debt and tax delinquency.** A crisis is coming where many farms will be unable (or will simply refuse) to make debt and/or tax payments. The *rayon* administration should have the right to confiscate land and property if the borrower is delinquent in payments.

ANNEX 5.2
LAND RIGHTS ALLOWED BY RURAL COMMITTEE HEAD,
RURAL COMMITTEE HEAD SURVEY, 1995

Indicator variables	Kyrgyz Republic
Percent of new peasant enterprises in which head has the following rights without need for authorization (rights with authorization in parentheses):	
Rent-out land shares	84 (9)
Sell land shares	44 (15)
Rent-out physical land	86 (9)
Sell physical land	40 (15)
Of those indicating that authorization to rent/sell land shares (physical land) is needed, from whom (%):	
Head of peasant farm	35 (36)
Rural committee	41 (39)
<i>Rayon</i> officials	14 (14)
Mixed	10 (11)
Peasant farm land shares (physical land) can only be transferred to (%):	
No response or not clear	13 (15)
Anyone, no priorities	55 (53)
Peasant farm member	17 (17)
Village residents	15 (15)
Percent of rural committees indicating that individual families within the new peasant farming enterprise have the right to (rights with authorization in parentheses):	
Rent-out land shares	84 (11)
Sell land shares	40 (18)
Rent-out physical land	81 (12)
Sell physical land	37 (18)

ANNEX 5.3
SEVERITY OF AGRICULTURAL PROBLEMS,
RURAL ENTERPRISE HEAD SURVEY, 1995^a

	Osh and Djalal- Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
Slow progress on demarcating and documenting land rights of individual households within enterprises	1.4	1.8	1.2	1.4
Lack of knowledge on how to farm	1.2	1.5	1.5	1.4
Slow progress on demarcating and documenting land rights of peasant farming enterprises	1.5	1.8	1.3	1.5
Irrigation water distribution	1.9	3.0	2.4	2.4
Lack of markets for farm output	2.2	2.2	3.0	2.5
Lack of seeds	2.0	3.5	2.8	2.7
Lack of farm extension or veterinary services	2.4	2.4	3.6	3.0
Lack of fertilizer and farm chemicals	3.2	4.5	4.0	3.8
Lack of fuel	3.4	4.0	3.9	3.8
Lack of spare parts or equipment	4.1	4.3	4.1	4.1
Lack of credit	3.8	4.1	4.5	4.2
<p>a. Figures are weighted averages of the following scale: 1 = not a serious problem, 2 = problem is somewhat serious, 3 = problem is serious, 4 = problem is very serious, and 5 = problem is extremely serious.</p>				

ANNEX 5.4
REASONS FOR SATISFACTION OR DISSATISFACTION
WITH FARM RESTRUCTURING,
RURAL ENTERPRISE HEAD SURVEY, 1995

	Osh and Djalal- Abad	Chui	Naryn, Talas, and Issyk-Kul	Kyrgyz Republic
General degree of satisfaction with the farm restructuring to date: ^a				
Farm enterprise head	3.8	3.5	3.3	3.5
Most individual households within enterprise	3.7	3.3	3.3	3.4
Social service workers	3.7	3.3	3.0	3.3
Pensioners	3.6	3.4	2.9	3.3
Most important reasons why certain groups are pleased or very pleased with the reforms (%):				
People are independent	50	50	56	52
People able to get land of their own	17	25	38	25
People see the fruits of their labor	14	17	6	12
Labor efficiency/productivity improves	19	8	0	11
Most important reasons why certain groups are dissatisfied or very dissatisfied with the reforms (%):				
Economic hardship	50	42	39	43
Machinery problems	14	17	27	21
Slow pace of reforms	9	25	27	21
No credit	9	16	5	8
No wages for social service workers	14	0	0	4
People not ready	4	0	2	3
<p>a. Figures are weighted averages of the following scale: 5 = very pleased, 4 = pleased, 3 = indifferent, 2 = dissatisfied, 1 = very dissatisfied.</p>				