

22216



National
Foreign
Assessment
Center

~~Confidential~~

USSR: Private Agriculture on Center Stage

An Intelligence Assessment

*Information available as of 7 August 1981
has been used in the preparation of this report.*

CIA HISTORICAL REVIEW PROGRAM
RELEASE AS SANITIZED
1999

This assessment was prepared by
Office of Economic Research.
Comments and queries are welcome and may be
directed to the
OER

This paper was coordinated with the Office of
Political Analysis, the Office of Geographic and
Societal Research, and the National Intelligence
Officer for the USSR and Eastern Europe

~~Confidential~~
ER 81-10309
September 1981

National Security
Information

Unauthorized Disclosure
Subject to Criminal Sanctions

A microfiche copy of this document is available from OCR/DLB (351-7177), printed copies from OCO/IMD (351-5203). Regular receipt of NFAC reports in either microfiche or printed form can also be arranged through OCO/IMD.

Derivative classification
Review 10 years from date
Derived from multiple sources

All material on this page
is Unclassified

2 8 7

BLANK PAGE

USSR:
Private Agriculture
on Center Stage

Key Judgments

Two successive poor years in Soviet agriculture have impelled the leadership to again encourage private agricultural activity. In January the Central Committee and Council of Ministers released a decree aimed at increasing private agricultural production, particularly of meat. But this decree, like its predecessor in 1977, is not likely to overcome the numerous problems hindering private-sector farming.

Private agriculture plays an important role in the supply of food to the Soviet population. About one-fourth of the total value of agricultural production, including 30 percent of the gross production of meat, comes from this sector. Its importance is amplified by the inefficient state system of processing and marketing foodstuffs, which results in low quality and frequent unavailability of perishable foodstuffs. Thus, Soviet consumers rely on private plots for a large share of their perishable foods. Despite the significance of the private sector, output has stagnated in recent years.

Soviet policymakers historically have made concessions to private agriculture in the spirit of practicality over ideology, viewing private agricultural activity as a temporary source to compensate for shortfalls in socialized agriculture. In fact, because of a high degree of interdependence between private and socialized agriculture, the private sector is vulnerable to many of the same difficulties affecting the socialized sector.

More recently, in the decrees of 1977 and 1981 the leadership has explicitly acknowledged the private sector's dependence upon socialized agriculture for inputs, urging—but not forcing—collective and state farm managers to make resources available to private producers. A novel aspect of the 1981 decree is the official sanction granted to the previously experimental contract system in which farm managers sell or supply young animals and some feed to private producers, who later sell the mature animals back to the farms. But private producers now, as after the 1977 decree, are the last claimants upon state agricultural resources. Feed for livestock is in short supply and will remain so in the 1981-85 plan period as farm managers try to meet higher meat production targets.

~~Confidential~~

Besides the problem of scarce resources—which is likely to persist in the next five years, if only because of unrealistic planning in agriculture—other factors will retard the performance of the private agricultural sector: declines in the rural population and the agricultural work force, the narrowing gap between rural and urban wages, the declining interest of rural residents in performing manual labor, the lack of small mechanized equipment, and the poor rural transport and marketing structures. All these factors are the result of past policy decisions, planning failures, or long-term demographic trends.

Certain parts of the new decree on private agriculture represent an attempt to incorporate, in diluted form, aspects of the private agricultural system prevailing in Hungary. The Soviet leadership is impressed with the performance of the private agricultural sector within the Hungarian system. But far-reaching changes within the Soviet agricultural system as a whole would be necessary to allow private agriculture to operate as effectively in the USSR as it does in Hungary. The Soviet leadership does not appear inclined toward such measures.

~~Confidential~~



Contents

	<i>Page</i>
Key Judgments	iii
Introduction	1
The Present State of Private Agriculture	1
Provisions of the January 1981 Decree	4
Outlook for the Contract System	5
Outlook for Feed Supplies	6
The Influence of Other Factors	7
The Hungarian Model	11
Prospects	12
<hr/>	
Appendix	
Possible Return Over and Above Feed Costs for Individuals Raising Hogs and Poultry Under the Contract System	15

USSR: Private Agriculture on Center Stage

Introduction

Early this year the Soviet press carried a summary of a new decree supporting private agricultural activity. Following on the heels of two back-to-back poor years in agriculture and attendant shortages of both quality foods and some staples, the decree, which includes several innovations, is aimed at boosting food output and rural self-sufficiency.¹

Private agriculture in the Soviet Union is carried out on some 40 million small plots of land, up to 0.5 hectare in size, which the state allocates for individual use. In addition, families usually keep a few head of cattle or pigs and a small flock of poultry. For most people with private plots, private agricultural activity is a secondary occupation. Although the private agricultural sector produces roughly one-fourth of the gross value of agricultural output, its economic significance cannot be measured by share of production alone. Because the state-operated system for processing and marketing perishable foodstuffs is highly inefficient, low quality and shortages of state-supplied perishables are chronic. Therefore, Soviet consumers rely either on their own plots or on direct purchases from private producers for a major share of their consumption of quality vegetables, meat, dairy products, and other highly perishable produce.

Since the end of the Stalin era, policy support for private agriculture has followed an on-again, off-again pattern. When the socialized sector has faltered, the leadership has loosened restrictions on private agriculture; conversely, when the socialized sector has shown signs of recovery and stability, Moscow has abandoned campaigns to boost output

¹ The grain harvests of 1979 and 1980 were 179 and 189 million metric tons respectively, well below the 10th Five-Year Plan average of about 205 million metric tons. The potato harvest last year was 67 million tons, the lowest since 1951. The major shortfall in this crop, often referred to as "the second bread," is resulting in shortages in many areas, and is also affecting the livestock sector, since about 30-40 million tons, or about 40 percent of an average potato crop, is normally used for livestock feed.

from private agriculture.² In 1977 the leadership issued a decree supporting private agriculture. The efforts to expand private production in 1977 followed the disastrous grain harvest of 1975. The output of 140 million tons fell short of the target by 75 million tons, resulting in a sharp drop in meat production in 1976. In 1978, the Soviets had a record harvest and the leadership's promotion of private agriculture waned. In 1979 total meat production stagnated, and in 1980 fell by 2.5 percent, resulting in a per capita drop of 3.5 percent. The retail sector for food is in large-scale disequilibrium with shortages of meat, dairy products, and other foods reaching serious proportions.³ Thus, the leadership's centerpiece in its consumer program—improving the diet—has already suffered a reversal. Once again, private agriculture is in the spotlight.

The Present State of Private Agriculture

Since the 1930s when Soviet agriculture was collectivized, private agriculture has continued to coexist with the public sector, albeit in an uneasy ideological setting. The ascendancy of practicality over ideology is due to the fact that private agriculture has harnessed land and labor that the public sector has not managed to utilize fully, in the process playing a substantial role in the production of food.

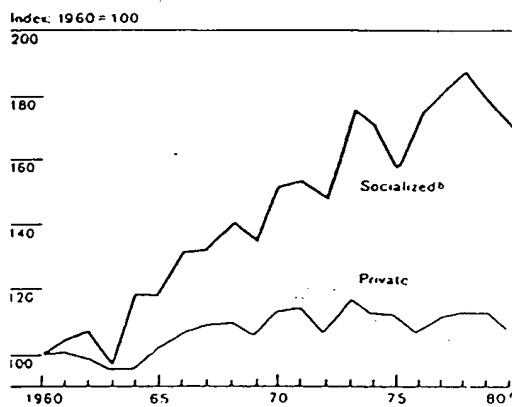
But past progress in private agriculture has been uneven. After output surged following Khrushchev's demise in 1964, output in the private sector has declined since 1973 (see figure 1). The proportion of

² Trends in Official Policy Toward Private Activity in the USSR, ER IR 70-9.

³ Over 90 percent of food sold is through state-controlled outlets at set prices. At collective farm markets, where private producers sell their surplus, prices vary according to supply and demand, and are now between two and three times those in state outlets. The gap between supply and demand for quality foods has widened because of a continued rise in disposable money income and the official policy of holding retail prices at relatively low levels in state retail outlets.

Figure 1

USSR: Farm Output by Sector*



*Gross value in 1960 and 1965 prices; a mixed index.
 †Collective and state farms.
 ‡Primarily

Private agricultural production in total farm output also has been declining steadily, from 31.5 percent in 1965 to less than 25 percent in 1979.¹ The private sector shares in meat and milk—key foods to the improvement of the Soviet diet—have also posted gradual declines in the last decade and a half (see table 1).

Livestock inventory figures for privately held livestock also reflect the declining role of the private sector. The private sector's share in the total number of livestock (cattle, pigs, sheep, and goats) dropped from one-fourth in 1971 to one-fifth in 1981.² The brief effect of the 1977 decree shows up in the yearly totals for 1977 by animal category (table 2). By the end of 1978 private herds, with the exception of hogs, declined

Measured in terms of gross value of output.
 Livestock figures as of 1 January 1971 and 1 January 1981.

Table 1

Percent

Private Sector Output as a Share of Total Output^a

	1965	1970	1975	1980
Meat	40	35	31	31
Milk	30	36	31	30

^a *Narodnoye khozyaystvo SSSR, 1965, 1970, 1975-79; Ekonomicheskaya gazeta, No. 25, 1981.* These figures do not represent an absolute drop in private-sector output but rather the more rapid rate of advancement in the socialized sector. Private-sector meat production stagnated in 1976-80.

slightly, despite the record grain harvest of 1978. Herd inventories in 1980 show that all categories of private livestock continued their gradual decline.

The private sector's share in hectareage devoted to crops, vineyards, and orchards has declined as well, from 5.0 percent in 1970 to 3.5 percent in 1979.³ Here, too, the decree of 1977 appears to have had little effect in maintaining private agriculture's share in resource use.

Private farmers grow only a small amount of the feed needed to maintain their livestock and depend heavily on the socialized sector for grain. About 60 percent of total grain supplies in the USSR is used to support livestock, yet the private sector produces only 1 percent of the total crop. In the area of roughages, the dependence is also high. Except for potatoes, only a small amount of forage is grown on private plots; hay, straw, green fodder, and silage come from the socialized sector.

Besides the areas directly under the control of households, the private sector has access to certain land controlled by the socialized sector for pasturing pri-

¹ In addition to area used for crops, vineyards, and orchards—in 1970, 10.37 million hectares and in 1979, 7.72 million hectares private farmers are directly allocated some pasture and haylands, which in 1980 amounted to 0.62 million hectares. (*Moscow News*, No. 49, 1980.)

² The private sector's share in potato production was 59 percent in 1979 (65 percent in 1970).

Table 2

Million head at yearend

Private Herd Inventories *

	1970	1975	1976	1977	1978	1979	1980
Cattle	25.0	23.5	22.8	23.3	23.1	23.1	22.9
Cows	15.5	13.7	13.4	13.4	13.3	13.2	13.2
Hogs	16.5	12.2	11.8	14.8	14.8	14.8	14.3
Sheep and Goats	33.2	29.4	28.8	29.4	29.2	29.8	29.2

* *Narodnoye khozyaystvo SSSR, 1975-79; Pravda, 24 January 1981.*

vately owned livestock and harvesting hay. If all of the area in the socialized sector that directly or indirectly produces feedstuffs for the private sector is added to the relatively small area directly held by households, the total area given over to supporting private farming comes to roughly 121 million hectares, or about 20 percent of all the arable land in the USSR. Feedstuffs (grain, silage, hay) are received as payment in kind for participating in work on collective or state farms. Theft or "misappropriation" of feedstuffs is also practiced.

Private individuals raising livestock and poultry also rely heavily on bread and other cereal products for livestock feed. One Soviet scholar estimated that the amount of bread products consumed as feed in 1975 amounted to between 5 and 6 kilograms per capita of population, or 1.4 million tons of bread,⁵ about 4 percent of bread and grain products sold that year.⁶ This practice, albeit illegal, occurs not only because feed is in short supply, but also because it is a highly economic way of feeding animals. The longstanding imbalance in the price of bread in state stores and livestock products in the free market consistently has induced individuals to feed bread to livestock. Table 3 sets forth the relationship in relative prices that has

⁵ P. A. Lokshin, *Spros, proizvodstvo i torgovlya* (Moscow: Ekonomika, 1975), p. 91. The Ministry of Trade calculated a higher but unspecified figure.

⁶ The practice of feeding bread to livestock probably accounts for some of the occasional disruptions in retail supplies of bread in rural areas. From time to time public campaigns are employed to denounce the practice of feeding animals cereal products sold in state retail stores.

Table 3

USSR: Ratio of Free Market Price of Livestock and Poultry to Cost of Rye Bread Required for Their Production *

	1966	1970	1975	1981
Pork	1.79	2.31	3.17	3.91
Beef	1.73	1.70	2.33	2.48
Poultry	3.65	6.76	6.99	8.76

* Prices of meat based on average Moscow collective farm market prices of January, February, and March.

led to the widespread use of bread for feed. Because bread prices have been maintained by the state at the same level while prices of livestock products in the free market have been rising, there has been an increasing incentive to buy bread for feeding.

Restrictions on private agriculture are now relatively relaxed. The confiscation of privately owned animals, the prohibition on the keeping of livestock and poultry in towns and settlements, and restrictions on the private sector's access to feed have been ended by the Brezhnev regime. The problem of encouraging the private sector, therefore, hinges less on such passive support as fewer restrictions than on active economic support—that is, the provision of adequate supplies of agricultural resources, particularly feed for livestock.

~~Confidential~~

Provisions of the January 1981 Decree

The new decree, like the 1977 decree, criticizes local officials and state and collective farm managers for not encouraging private agricultural activity, especially the raising of livestock. Indeed, in many respects it repeats the substance of the older decree; in two ways, however, it makes an innovative departure. It ratifies and recommends the contract method of raising livestock,¹¹ and it removes restrictions on the number of livestock held by individuals for livestock being raised under contract (that is, if the livestock is to be resold to the socialized sector).¹² The basic regulations on land, which permit up to 0.5 hectare for personal use, remain in force.¹³ Thus the decree maintains the basic controls over the private sector, while linking some private activity more closely with the socialized sector. Also, state farms, collective farms, and other state agricultural enterprises, in order to induce young people to stay on farms, can now grant young livestock free of charge to newly formed families.

The decree repeats and expands a number of provisions of the 1977 decree. For example, up to 50 percent of the loan granted to individuals to purchase cattle can be forgiven. The 1977 decree allowed up to 100 rubles in loan for purchase of cows and up to 250 rubles for calves. Thus an individual can now receive a grant of 250 rubles for purchasing cows and 125

rubles for calves.¹⁴ Credit advanced to individuals for improving private hectareage is also to be increased and repayment terms improved. The 1977 decree permitted loans of up to 1,000 rubles, repayable in five years, for improvement of private plots; now improvement loans up to 3,000 rubles, repayable over 10 years starting the third year after being received, are allowed. Again farms are urged to supply more feed, make available more socialized land for grazing, haying, and raising of feed, and provide more assistance to individuals in marketing their produce.

The contract system is voluntary and therefore depends upon the interest of individuals and farm managers. Socialized farms are supposed to provide young animals, feed, veterinary and other services, and in turn are allowed to include products obtained under contract toward their own plan fulfillment targets. Terms of the contracts—such as prices individuals pay for the young animals and the amount and price of feed to be provided by the farms, as well as the buyback prices—are to be negotiated on an individual basis.

Two basic arrangements involving feed allotments and buyback prices are used in experimental contract systems now in operation (in almost all the experimental systems described, the individual pays the state purchase price per kilogram for the young animal):

- Option 1—The farm supplies the individual a portion of the necessary feed at cost (the price the farm pays the state for the feed). The individual must obtain the rest of the necessary feed himself. The buyback price is generally set at or somewhat less than the state purchase price.
- Option 2—The farm supplies a portion of the necessary feed free of charge. Again, the individual must obtain the remaining feed necessary to raise the animal to the weight specified in the contract. The buyback price is low, about one-fourth to one-half of state purchase prices. Sometimes the deal is

¹¹ Two hundred and fifty rubles is roughly equivalent to 40 days' wages for a state farm worker. The purchase price of a cow is roughly 1,000 rubles.

¹² The practice of sales from private individual to farms based on a fixed delivery contract goes back at least to the early 1960s, but only on a small scale. Karl-Eugen Wadekin, *The Private Sector in Soviet Agriculture*, 1973, pp. 245-6.

¹³ A complex set of regulations governs the private holding of livestock. Regulations differ for four basic categories: collective farm members, wage and salary workers in rural areas who are engaged in agricultural occupations, wage and salary workers in rural areas who are not engaged in occupations connected with agriculture, and wage and salary workers in urban areas. In addition, the regulations vary considerably by locale. In general, the most liberal rules apply to collective farm workers; the Model Collective Farm Statute of 1969 sets the upper limits as: "One cow with calves of up to one year, one calf of up to two years, one sow with piglets of up to three months or two hogs for fattening, and up to 10 sheep or goats" as well as an unspecified number of geese, poultry, and rabbits.

¹⁴ Also regulated according to the four categories. The average size of private plots of collective farmers is 0.31 hectare; of workers and employees in rural areas, 0.17 hectare; of state farm workers, 0.21 hectare; and of urban workers and employees, 0.07 hectare. *Prosy ekonomiki*, No. 5, 1981, p. 68.

~~Confidential~~

~~Confidential~~

made more attractive by allowing the private producer to keep a portion of the livestock. For example, if five or more pigs are raised, the private producer might be allowed to keep one. Occasionally the private producer is allowed to keep 30 percent of the poultry he raises. However, in such cases the portion of feed allotted per animal is generally lowered.

Outlook for the Contract System

The overall availability of feed will affect success of the contract system of raising livestock, in which private producers are to depend upon local farms for feed and other help. The private sector's heavy dependence on the public sector for resources-- most importantly, feed for livestock--means that perturbations in socialized production reverberate into the private sector. Thus, shortages of feed in the public sector have an adverse impact on the output of the private sector precisely at those times when the Soviet leadership is most inclined to encourage the private sector.

Because the decree leaves the decisionmaking power on entering into contracts to farm managers and individuals, the decree could be thwarted at the ground level. If the system is to work, both farm managers and private producers must perceive clear advantages. However, a number of crosscurrents render relative advantages difficult to predict.

For farm managers, the strongest incentive to enter contracts is the ability to count livestock obtained under contract toward procurement targets. Another incentive is the greater care that individual animals would receive in the hands of private producers and the reduction in animal mortality that would likely ensue. The greatest disincentive is the risk in providing resources--feed supplies and young animals--to individuals who might not return the results of their labor to the farms, despite the financial penalties for which the individual would be liable. The penalty the individual pays to the farms for failure to return the mature animal, however, would not compensate the farm manager for loss of the animal to count toward plan fulfillment. Thus, farm managers may be loath to extend cooperation to individuals by providing

young animals and feed." Faced with present conditions of severe feed shortages, this disincentive will be particularly strong, and managers will be more inclined to spend resources on the animals over which they have direct control. If pressured by local officials to set up contracts, they may fail to supply the full quantity of feed for private use stipulated in the contracts.

For the individual the strongest incentive to enter into a contract is the prospect of a guaranteed feed supply." Without this, the private producer would be better off to expend the considerable effort necessary to obtain feed, slaughter and dress the animal, and sell the meat at a collective farm market (CFM), where prices are considerably higher than state purchase prices. Details of experimental contract systems published in the Soviet press indicate that farms are making available to private producers under contract less than half, often only one-third, of the feed units necessary to raise animals." Private producers therefore still must rely on their own efforts and finances to obtain the remaining feed.

It appears that the practice of supplying less feed than is necessary to raise animals follows not only from feed shortage conditions but also from the judgment

"As the decree of 1981 underscores, Party Secretary Kislev of Belorussia recently admitted that farm managers "view private plots as a burden." A recent report from Omsk, where a campaign to encourage private meat production began five years ago, described the "indifference" and "active opposition" of farm managers to privately owned livestock. Last fall at a roundtable discussion of the problems of private agriculture conducted by the All-Union Central Council of Trade Unions, the Central Committee of the USSR Union of Agricultural Workers, and the Regional Trade Union Councils of Belorussia, the participants pointed out the reluctance of farm managers to share pastureland, blaming the fact that many collective and state farms do not have sufficient pasturelands for their own animals. *Sovetskaya Belorussiya*, 12 November 1980; *Sovetskaya Rossiya*, 1 March 1981; *Trud*, 11 October 1980.

"Feed and other shortages have put stress on small-scale animal husbandry. Recently the Moldavian Union of Consumer Cooperatives surveyed private plot holders to determine why they kept no livestock or did not increase their holdings. Forty-five percent blamed the lack of feed, 25 percent cited a lack of necessary space and equipment, 25 percent named the difficulty in acquiring young stock, and 5 percent named a lack of time or poor health. *Sovetskaya Moldaviya*, 10 March 1981, p. 2.

"Based on actual state and collective farm feed conversion ratios.

~~Confidential~~

~~Confidential~~

that private producers are already obtaining a large part of the necessary feed units from state resources. In a recent article,¹ an academic argued that when one takes account of the large amounts of bread acquired through state stores and of concentrated feed acquired through theft, the private sector's feeding efficiency in poultry raising is in reality less than that of the public sector and, therefore, to provide more concentrated feed to private producers under contract would be inefficient.

In addition, our calculations show that the private producer's profit under the contract system tends to be low, especially when contrasted with the profits derived from CFM prices (appendix).

However, some of the reported experimental contract systems allow private producers to keep some of the contract livestock -- up to 30 percent -- for themselves. Such contracts may tip the scales toward inducement, particularly if meat shortages continue, as seems likely. On the other hand, most farm managers probably will view with even less enthusiasm the prospect of supplying grain for animals not eventually returned to the farm.

Deputy Gosplan Chairman Ryzhkov recently emphasized that the fate of the contract system depends on this balance of incentives, stating at the 26th Party Congress that help to the private sector is to be a "voluntary" program and cannot be incorporated into the Plan. Nevertheless, some targets have been set. In 1981, 14.2 million young pigs,² 586 million young poultry, and 3.5 million tons of mixed feed are to be sold to private producers under various arrangements, compared with 14.8 million young pigs, 570 million young poultry, and about 3.5 million tons of mixed feed sold in 1980.³ Thus, while plans call for increases

¹ *Sel'skaya zhizn'*, 30 May 1981, p. 2.

² Sales of piglets in the first six months of 1981 are 1.4 million above last year's sales for the same period.

³ *Zhivotnovodstvo*, No. 1, 1981; *Ekonomika sel'skogo khozyaystva*, No. 1, 1980. In 1975 the Ministry of Trade estimated that demand for concentrated feed sold through state and cooperative retail outlets was 7 million tons, in contrast to the 3 million tons allocated. *Sprava proizvodstva tovarov*, p. 91.

in the number of young animals provided, they fail to provide a concomitant increase in mixed feed.⁴

Outlook for Feed Supplies

After two years of poor grain harvests, feed supplies are tight.⁵ Above-normal slaughtering occurred in the early months of 1980, and reports continue to surface that feed supplies are excruciatingly short in many areas.

Feed shortfalls, despite continued high imports of grain, are likely to persist for the next five years. Annual average meat production planned for 1981-85, 17.0-17.5 million tons, represents an increase of more than 15 percent over the annual average of 14.9 million tons achieved in 1976-80.⁶ The Soviets will likely fall short of their highly ambitious target for annual average grain production, which represents a sizable increase of 17 percent over annual average production in 1976-80.⁷ This year the grain harvest will be substantially below the planned target.

Such taut planning means that farm managers will not likely have the feed supplies necessary to render more assistance to private producers. Recently, Ukrainian Party First Secretary Sheherbitskiy warned that, even if grain production targets for the

⁴ This amount of mixed feed (3.5 million tons) is about 70 percent short of what is required to raise the 14.2 million pigs or about 30 percent short of what is required to raise the 586 million young poultry. However, individuals are supposed to receive other types of feed as well through the farms.

⁵ According to official statistics, less feed was used in 1979 than 1978 and 1977. Feed units (in centners) expended per "standard animal unit" dropped from 27.3 in 1977 to 26.9 in 1978 and to 26.1 in 1979. Yet feeding efficiency apparently has not improved. Between 1975 and 1979 feed conversion ratios, with the exception of cattle on collective farms, worsened. (For details see *Khimiya i sel'skom khozyaystve*, No. 2, 1981.) Another factor which has affected feeding efficiency negatively is the improper composition of feed.

⁶ The announced goal for 1985 is 18.2 million tons of meat.

⁷ The annual average grain crop in the 1976-80 plan period was an increase of about 13 percent over the annual average crop in the 9th FYP; the annual average grain crop in the 1971-75 plan period was an increase of about 8 percent over the annual average crop in the 1966-70 plan period.

~~Confidential~~

next five years were met, the republic would still not have enough grain to reach meat production targets given the current feed conversion ratios.²⁴

Feed shortages exacerbate the system-induced tendency of farm managers to hoard resources. Plan targets are generally set by increases over the achieved level; thus, the farm manager knows that next year he will have to produce more and will be inclined to hoard resources. In addition, plan targets are frequently increased and managers know it is prudent to keep extra supplies on hand to meet new targets or to barter with other farms for various resources. In an attempt to introduce more stability into local planning, the yearly plans for the five-year period, set at the beginning of the five-year period, are not supposed to change; neither are figures for delivery of supplies.²⁵ Given the past record of changes in annual and five-year plans, however, it seems doubtful that farm managers will have much confidence in future plan stability and likely will still hoard resources for various contingencies, such as under-delivery of supplies.

The Influence of Other Factors

A broad range of factors, many of which are affecting the performance of agriculture in general, reinforce the likelihood that the new decree will not result in a surge in private agricultural activity: demographic trends, rural housing policies, the narrowing gap between urban and retail trade in food, the inadequate supply of machines and implements, the poor marketing and transport structures, the narrowing gap between urban and rural incomes, and apprehension about the longevity of leadership support for private agriculture.

The Demographic Trend. Between 1970 and 1979, the rural population declined by 6.9 million.²⁶ This long-range demographic pattern will have a depressing

²⁴ *Pravda Ukrainy*, 18 March 1981.

²⁵ According to a decree of November 1980.

²⁶ Due to movement to cities, and the transformation of some rural populated centers into urban settlements. The gross decline of 15.6 million was partially offset by an 8.7 million natural increase.

effect on private agricultural output. Moreover, the structure of the rural population is changing. With the proportion of elderly increasing, fewer able-bodied people are available to perform the heavy manual labor involved in cultivating plots and raising livestock, basically labor-intensive activities.

A per family comparison of livestock holdings in 1970 and 1979 demonstrates that the decline in private holdings of livestock is due not only to rural population declines but also to the declining feasibility of and interest in raising livestock (table 4).

With the exception of goats, the holdings per family declined. The sharp decline in private holdings of cows is contributing to the severe milk shortages now occurring, as more families have turned to the trade network, adding considerable stress on supplies.

The declines are even more pronounced in the Russian Soviet Federated Socialist Republic (RSFSR) (table 5), where again holdings per rural family of all types of livestock, except goats, declined.

In times of stress, private holdings of cattle (especially cows) decline while goat herds increase. Goats are the "poor man's cows"; peasants will substitute goats for cows when feed is scarce.²⁷

Other demographic trends in the countryside will tend to diminish private farming. For example, last year a study of private farming in the black earth zone of the Russian republic found an inverse relationship between occupational ranking and private plot activity among rural inhabitants. The study found that the higher the skill level or job description of one or more partners of a couple, the less likely the family was to keep livestock.²⁸

²⁷ Six to eight goats can be kept on the feed required for one cow. In addition goats will graze on poor-quality "scavenger feeds" that are normally refused by other livestock.

²⁸ *The Current Digest of the Soviet Press*, vol. XXXII, No. 14, p. 9.

Confidential

Table 4

USSR: Livestock per 100 Rural Families *

	Head		Percent Change
	1970	1979	
Cattle	101.2	96.8	- 4.3
Cows	63.0	55.3	12.2
Hogs	67.2	62.0	- 7.7
Sheep	116.9	106.0	- 9.3
Goats	17.7	18.8	6.2

* Derived from table 2 and 1970 and 1979 census counts of rural families. Livestock figures as of 1 January.

Table 5

RSFSR: Livestock per 100 Rural Families *

	Head		Percent Change
	1970	1979	
Cattle	95.4	86.0	- 9.9
Cows	59.6	49.2	17.4
Hogs	56.1	55.5	- 1.1
Sheep	146.5	114.6	- 21.8
Goats	20.1	21.5	7.0

* Derived from *Narodnye khozyaystva RSFSR*, 1970 and 1979, and 1970 and 1979 census counts of rural families. Livestock figures as of 1 January.

The share of specialists—those with higher or some specialized secondary education—in collective and state farms has been increasing steadily. From 1960 to 1977 the proportion of specialists among collective farm workers has quadrupled, and the proportion of specialists among state farm workers has tripled.¹²

Underlying the increase of specialists in the countryside is the rising educational level of rural residents. In 1959, the proportion of rural residents with a higher or at least some middle-level education was one-fourth, rising to one-third in 1970 and to one-half in 1979.¹³ As rural educational levels advance, interest declines in performing the type of manual labor associated with current practice in Soviet private agriculture.

Rural Housing Policies. The poor record of investment in rural services and housing as well as the attraction of higher wages and better services in the cities have caused a continuing migration from the countryside. But the government's push to increase and improve rural housing and services has also perversely affected private agriculture. This policy, now being publicly questioned, was intended to move the inhabitants of small and medium-sized rural settlements to larger communities in order to provide

goods and services more efficiently. A large number of rural population points were designated as "non-viable"; new residential construction was banned. At the same time one or more demonstration communities per oblast were built, chiefly high rise buildings with complete utility services, but without private plots, outbuildings for livestock, or cellars. According to a recent survey by the Belorussian Central Statistical Administration, families living in multistoried buildings have only one-third as many cattle and one-half as many hogs as those families living in detached buildings. Almost half of the rural families living in large apartment buildings keep no livestock at all.¹⁴

Narrowing Gap Between Urban and Rural Retail Trade in Food. Over the last decade, the gap between urban and rural availability of food in state retail outlets has narrowed. The ratio of urban to rural retail food trade per capita was 2.6 in 1970, declining to 2.4 in 1975 and 2.2 in 1979.¹⁵ While the rural population has decreased, the number of state retail and cooperative stores in rural areas has increased, from 278,700 in 1970 to 283,100 in 1979.¹⁶ In addition, many rural residents journey to urban areas to purchase foodstuffs. Thus, the rural population, which

¹² *Sovetskaya Rossiya*, 7 December 1980, p. 2.

¹³ Derived from *Narodnye Khozyaystva*, 1979, p. 136.

¹⁴ *Narodnye Khozyaystva*, 1979, p. 110.

¹⁵ *Sotsiologicheskoe issledovanie*, No. 2, 1980.

¹⁶ *Vestnik statistiki*, No. 6, 1980.

Confidential



at one time had to raise virtually all its own food, can more easily obtain food through state-operated stores."

The Inadequate Supply of Machines and Tools Suitable to Small-Scale Farming. Because the number of horses has declined, the problem of plowing isolated plots has worsened. In addition, although state and collective farms in some cases assist in plowing, often individuals have no such help and must rely on their own hands and a few small implements. Despite years of planning, a minitractor suitable for small farming has only recently gone into production. "This year a garden tractor went into production at the Minsk tractor works;" indications are, however, that the production run will be small. "The tractor is intended for sale to individuals, although most likely on what is called an "organized" basis, meaning that prospective purchasers must first register and wait their turn, as is the case with automobile purchases."

A second, similar minitractor is scheduled to go into production at the Kutaisi tractor works in Georgia this year. Production is to be 150 this year, 1,500 in 1982, and reach 35,000 in 1986. "Thus, the chances of the many million holders of private plots acquiring

a minitractor in the near future are small. Because of the cost, such tractors may well be more feasible for "minicollectives," groups of 10 to 15 private farmers who work together, pooling their resources. Such groups are being encouraged on an experimental basis in Moldavia."

Meanwhile, the leadership apparently has realized that the prospects for mechanizing the private sector soon are not favorable and is turning to animal power as a partial solution. A decree this June calling for the expansion of horse breeding is aimed at assisting farm work."

The outlook for a better supply of small agricultural implements is also problematical. Small implements such as scythes are important; many tracts of land in private use were given to individuals because their terrain makes them unsuited to mechanized operations. In 1977 a number of governmental units involved in the production and sale of small implements agreed on a list of tools and equipment necessary for private farming. Only about half of the items on the list are now in production. "Because these items are generally assigned for production to factories of heavy industry and constitute only 1 to 2 percent of the factory's planned output, they receive low priority and are often produced only in small quantities and in poor quality. Voluminous complaints in the Soviet press indicate that the shortage of small implements is serious."

Numerous local Soviet officials have commented on the increasing reluctance of rural inhabitants to perform the manual labor of cultivating private plots or raising livestock. The campaign to mechanize the socialized sector has put more machinery on state and collective farms, but in the process it has accentuated the labor-intensive nature of private farming. As one oblast secretary put it, "The gap between highly mechanized socialized production and the primitive methods of maintaining the private plot is being felt

"In addition, many rural residents order food supplies at nearby state and collective farms. In Kalininskaya Oblast in the RSFSR, for example, 58 percent of the families on collective farms and 75 percent of the families of state farm workers buy their milk at their farm. Officials in Omskaya Oblast determined that up to 20 percent of gross meat production by state and collective farms was allocated to cover their own consumption needs. *Sovetskaya Rossiya*, 5 October 1981, p. 1; *Sovetskaya Rossiya*, 1 March 1981, p. 3.

"In 1968 the Ministry of Tractor and Agricultural Machine Building was given the responsibility for producing a minitractor. " *Izvestiya*, 25 March 1981, p. 6. The Belarus' MTZ-05 is a two-wheeled, five-horsepower machine to which attachments for plowing, harrowing, cultivating, and digging up crops can be coupled. It is equipped with four forward and two reverse gears. Without attachments the tractor will cost 1,100 rubles. " *Pravda*, 8 December 1980.

"Earlier the Main Administration for Mechanization in the RSFSR had planned to sell the minitractors to state and collective farms only. A portion of the minitractor production is still probably intended for sale to state and collective farms because the announcement of the tractor production mentioned the likelihood of the tractor being made available for hire. " *Sovetskaya Iorgoniya*, 10 March 1981. A factor which may affect planned output is the plan fulfillment indicator of total horsepower produced. From the point of view of the tractor industry, there is little incentive to produce low-horsepower tractors.

" *Sovetskaya Moldaviya*, 10 March 1981, p. 2.

"It is aimed as well at easing meat shortages.

" *Pravda*, 18 February 1981.



Confidential

more and more keenly.⁶⁶ Thus, the widespread provision of minitractors, or at least better hand tools, to ease the burden is important.

The Inadequate Marketing and Transport Structures. Private producers must spend considerable time and effort to get their production to market, in part because of the lack of a modern farm-to-market transportation system. Soviet economists estimate that 200 million man-days a year are lost in the independent marketing of private production. The network of points for the reception, storage, and processing of private production is thin. For example, the Chairman of the USSR Central Union of Consumers' Societies estimates that on average only one such point exists for 7,000 private plots. In the 11th Five-Year Plan, a high target has been set to improve the situation--the quadrupling of procurement points under the cooperative system. Given the problems affecting the construction sector, however, it is difficult to see how this plan can be met.

The inadequate marketing structure is caused in part by the poor road structure. Only about 15 percent of rural settlements are 10 kilometers or closer to roads suitable for automobiles.⁶⁷ Most rural roads are not hard-surface and become impassable for much of the year. There is only about one-fourth as much hard-surface roadway in the Soviet Union as in the United States. Yet progress remains slow. During the 1981-85 period, 80,000 kilometers of hard-surface roads are to be built, compared with 110,000 kilometers of hard-surface roads built during the first four years of the 1976-80 period. Slow expansion of the network of roads will continue to retard improvement of the marketing structure.

The Narrowing Gap Between Rural and Urban Incomes. Before the mid-1960s, private agricultural production was the main source of income and means of subsistence for many collective farm members. In 1966 a system of time and piece rates for collective farm members was introduced, meaning that fluctuation in income was lessened. This, plus the rise in farm income generated from increased procurement

prices, has caused collective farm member income to rise. The average income differential between all wage and salary workers and collective farm members⁶⁸ has decreased from about 60 percent in 1970 to 44 percent in 1979. As a result, the rise in collective farm members' income has made the income from private agricultural production a secondary rather than a primary income, although it is still highly important for many, averaging roughly one-fourth of total collective farm family income.

In addition, the increasing monetization of collective farm income is reducing payment-in-kind, meaning that collective farm members have less access to grain and other feedstuffs with which to support livestock. Also, because the state farm average wage is much closer to the national average wage, subsidiary income is not as important to state farm workers as to collective farm members. The average income differential between all wage and salary workers and state farm workers has decreased as well, from 23 percent in 1970 to 13 percent in 1979. The ongoing conversion of collective farms into state farms will make subsidiary income even less important to an increasing number of agricultural workers.⁶⁹

Perceptions That the Private Agriculture Campaign Is Temporary. Since the beginning of the Brezhnev years the leadership has made four previous efforts to boost the private sector in agriculture-- 1964-65, 1969, 1972, and 1976-77. Although the present campaign is receiving much attention in the Soviet press, the population has lived through other campaigns that resulted in no substantial long-run effort. The residual uncertainty about the longevity of leadership support may act as a deterrent to the kind of risk taking on the part of individuals that would produce a boost in output. Thus, although loans and credits are supposed to be available for individuals to buy livestock and build structures to house them, private producers may be reluctant to make use of them.

⁶⁶ For socialized activity. Includes income-in-kind.

⁶⁷ In 1970, there were 16.7 million collective farm workers versus 8.9 million state farm workers. In 1979, there were 13.7 million collective farm workers versus 11.5 state farm workers. Thus more rural residents have a higher income because they are on state farms.

⁶⁸ *Sovetskaya Rossiya*, 5 October 1981, p. 2.

⁶⁹ *Voprosy ekonomiki*, No. 1, 1980.

Confidential

Despite the numerous public endorsements of many government and party officials for the new decree, there remains in some party quarters a longstanding fear that the private plot system, if encouraged, will weaken rural workers' contribution to public-sector agriculture. For example, Party First Secretary Sheherbitskiy of the Ukraine, an important agricultural region, has given no public endorsement of the decree and is rumored to have warned the Central Committee that the attention to private plots could lead to a situation where they would compete with the state and collective farm system.

Even a recent article that endorsed the campaign warned that private plot activity can "have an adverse effect on the formation of the Soviet person's psychology, develop a money-grabbing attitude, and engender speculation." Last winter a Znaniye Society lecturer expressed the opinion that the private plot campaign was "temporary," necessary only until the "material base" of the socialized sector is fully established.

The Hungarian Model

There are some indications, however, that the campaign to encourage private agriculture may not be short lived," and that the leadership is formulating a more accommodating ideological approach to private agriculture. For example, a Soviet agricultural specialist, writing in the prestigious journal *Voprosy ekonomiki* this spring, referred to the "socialist nature" of the private plot system. Numerous favorable mentions in the Soviet press of the Hungarian agricultural system—including a complimentary remark by Brezhnev at the recent 26th Party Congress—suggest that some elements of the leadership are casting about for additional ways to foster private agriculture.

This spring another Znaniye Society lecturer stated that the leadership is considering an agricultural change along the lines of the "Hungarian Model" in which state cattle are gradually being distributed to

* This spring an All-Union Conference on Private Plot Development, organized by the All-Union Academy of Agricultural Sciences, the USSR Academy of Sciences Institute of Economics, and the USSR Academy of Sciences Institute of Economics of the World Socialist System, was held in Moscow. The government is now also publishing a new "how-to" magazine, *Prisudebnnye khozyaystva*, for private producers.

private plots and farmers' cooperatives." The present Hungarian party and government policy is much more liberal toward the private sector than that of the USSR. In the late 1960s the Hungarian party, as part of its new economic mechanism (NEM), adopted a new ideological approach to private agriculture. The formula now used is that of "organized unity" of the collective sector and the private household plots of the members of the collective farms, meaning that private farming is considered an "integral partner" with the socialist sector in agricultural production. This formula has been incorporated in the Law on Cooperatives. As a result, the produce of the household plots of the members of the collective farms now appears in the national statistics—unlike in the Soviet Union—as part of the socialized agricultural sector.

Moreover, recently the agricultural produce of the so-called auxiliary farms of blue-collar and white-collar workers in the nonagricultural sector has been shown in the statistics as part of socialized agriculture. Because the Hungarian party regards private plots belonging to members of agricultural cooperatives as part of the socialist agricultural sector, there is no restriction on the size of private livestock holdings. On the contrary, the government encourages the increase of private herds, providing subsidies for the purchase of animals. Contractual agreements between private producers and the socialized farms are widespread, with the farms supplying young animals and feed, and the private producers raising and fattening the animals.

Hungarian state and collective farms are expected to take account in their own economic plans of the needs of private producers by giving them technical advice, selling them seed, feed, and animals, and providing transport and marketing services. This type of intersectoral cooperation, which holds further possibilities," is a significant part of the country's functional

* In Hungary, more than 50 percent of all pigs and 75 to 80 percent of all poultry are privately owned. To encourage private ownership and breeding of cattle in Hungary about 26 percent of cattle in Hungary are now privately held; the state is providing annual subsidies for each animal owned, which increases substantially when a cow calves.

* For example, further efficiency through specialization with a division of labor between large socialized units concentrating on cattle, sheep, and hog breeding, and the private sector concentrating on fattening.



~~Confidential~~

and efficient agricultural system. But while the Soviet leaders would like to foster this aspect of the Hungarian agricultural system in the USSR, they clearly are not ready to institute the changes that make this Hungarian intersectoral cooperation successful and that would do much to aid private agriculture in the USSR. In Hungary direct planning and control of socialized agricultural establishments by state bodies were abolished in 1968. Present economic and agricultural policy is market and profit oriented. In agriculture as well as in the other sectors, the state confines itself to methods of indirect control (procurement prices, credits, subsidies). Within this framework, the managers of socialized agricultural establishments have considerably more freedom to decide on and execute production plans than do their Soviet counterparts. They themselves decide on the structure of cropping, the purchase and use of means of production, the choice, quantity, and quality of goods offered for sale, marketing channels and business relations, use of profits and investment. Thus planning on the particular levels necessary to promote and coordinate with private agricultural producers—the micro, or firm, level—is possible in Hungary but not in the Soviet Union. For example, farms in Hungary, because they manage their own procurement of farm inputs, can more easily attain the required proportion of supplies as well as additional supplies when needed than can Soviet farms, where deliveries of supplies are fixed in yearly amounts.

In the present drive to foster private agriculture in the USSR, the leadership has partially adopted some features of the Hungarian private agricultural system: for instance, the lifting of controls on livestock numbers held by individuals operating within the contract system, the permission to count contract animals toward state and collective farm delivery targets, and the provision of grants to purchase cattle. But the framework within which private agriculture exists in the USSR is that of a highly planned, centralized agriculture unable to interact effectively at the firm level with private agricultural activity. Until this changes—and for ideological reasons alone such a change seems highly unlikely in the near future—private farmers will continue to be the last claimants on state resources in the USSR.

Prospects

It is too early to assess the effect of the effort to encourage private agriculture. However, so far this year average monthly meat procurements from the private sector have been substantially below those of last year. In addition, reports from two republics this year indicate that the campaign there has not produced the leadership's hoped-for results. In May a republic-wide conference of local party committees in Latvia issued a report speaking of "unsatisfactory" results in increasing private-plot output. In April, First Secretary Kiselev of the Belorussian Party stated that the number of privately owned livestock had fallen.²

Some successive years of good harvests would considerably ease the feed situation now hampering both the public and private sectors in agriculture. On the other hand, good years for the socialized sector may cause the leadership to view support of the private sector as less an imperative than an option. In any case, state and collective farm managers will have high livestock targets to meet, meaning that the resource sharing called for in the decree faces trying times.

Although the leadership realizes that the enormous investments in agriculture have not brought the expected payoff and that continued large investments are necessary, it nevertheless views the coming decade as a transition era in which numerous problems will be substantially ameliorated. The principal reason given by Soviet officials for the continued existence of the private sector is economic necessity resulting from the still inadequate level of socialized agricultural production. Should the leadership come to believe that the socialized sector is progressing satisfactorily in the transition to greater efficiency and stability, the campaign of support for private agriculture will probably, as before, wind down.

A reimposition of the kind of harassment which existed in the last years of the Khrushchev regime, however, does not seem particularly likely as long as memories of the recent back-to-back poor harvests

² *Sovetskaya Latvija*, 15 May 1981; *Sovetskaya Rossiya*, 11 April 1981.

~~Confidential~~

~~Confidential~~

prevail. The specter of rapid reverses in agriculture raised by memories of 1979 and 1980 should surely dissuade the leadership from such a course. Therefore, the most probable outcome of the present campaign is that private agriculture will maintain its rough share in total production, posting neither significant advances nor reverses. If the campaign of support should dissipate, private agriculture's share will probably continue to slip.

~~Confidential~~

BLANK PAGE

Appendix

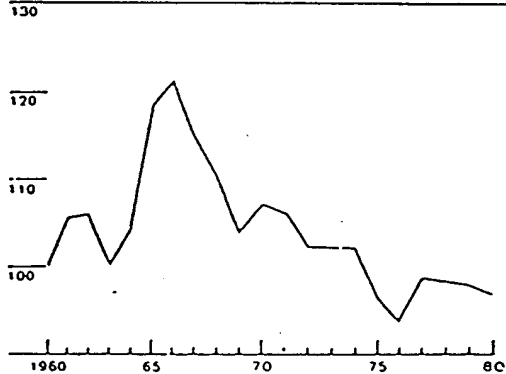
Possible Return Over and Above Feed Costs for Individuals Raising Hogs and Poultry Under the Contract System

In our calculations we assumed that the collective or state farm supplies private producers with both the young animal and a portion of the feed free of charge.¹ These favorable conditions, of course, are not the rule. Then using various feed conversion ratios, and with our estimates of average state purchase prices per kilogram (kg) of liveweight, we determined the range of profit the private producer in the contract system was likely to obtain. With poultry, the private producer could make from 1.55 to 1.78 rubles per kg. This is a lower profit than would be generated from the prices prevailing at collective farm markets, discounting for processing and marketing costs. A typical CFM price for poultry is now about 5 rubles per kg. The return over and above the feed costs per kilo of pork ranges from 0.07 ruble to 0.50 ruble, again lower than the profit that would be generated from CFM pork prices, which typically range from 4.00 to 8.00 rubles per kg.

¹ The amount of feed based on reports in the Soviet press on the operations of various contract systems.

Figure 2
USSR: Value of Livestock in Privately Owned Herds*

Index: 1960 = 100



*Constant 1970 prices. End of year data.