



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

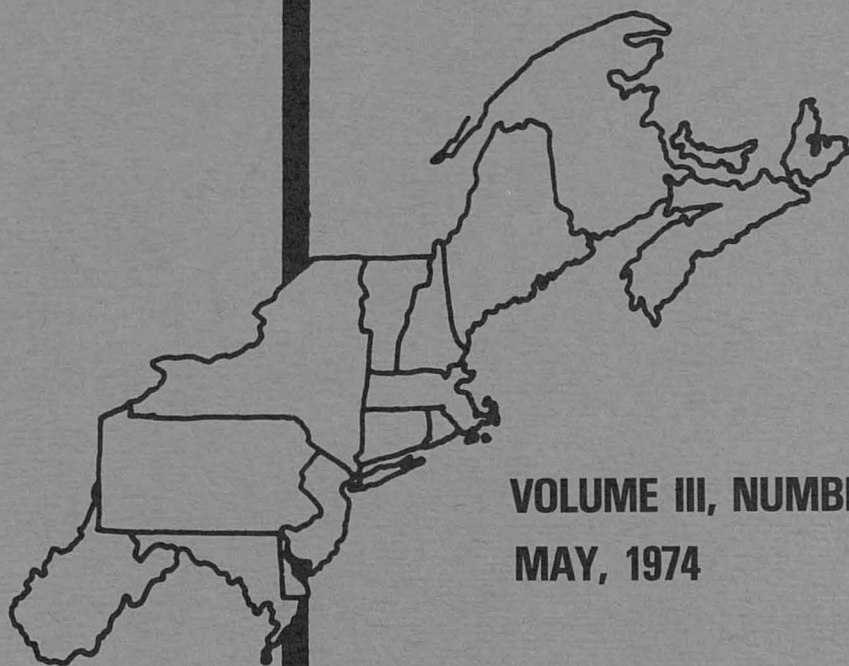
PER. SHELF

GIANNINI FOUNDATION OF  
AGRICULTURAL ECONOMICS  
LIBRARY

JUN 26 1974

# **JOURNAL OF THE**

**Northeastern  
Agricultural  
Economics  
Council**



**VOLUME III, NUMBER I  
MAY, 1974**

## PRIVATE ENTERPRISE IN SOVIET AGRICULTURE IN THE 1970'S

Elmar Jarvesoo

Professor 1/

Department of Agricultural and Food Economics  
University of Massachusetts/Amherst

The Soviet economic system is based on the principle of public ownership of all means of production. Consequently, private enterprise in Soviet socialist economy as a rule is not tolerated, allegedly to exclude unearned income and to prevent "exploitation of man by man". From the Soviet point of view, private enterprise is a disturbing and unpredictable element in their system of central planning, command economy and Party control. If it is not considered an outright crime it is characterized in the Soviet Union as a parasitic, socially unnecessary activity undertaken primarily for personal profiteering and for obtaining unearned income -- all unacceptable activities in a socialist society.

In the Soviet agricultural sector, however, private production is regarded differently. It is held to be fully legitimate, respectable and highly necessary "at the present stage" of development. In fact, a large number of very small private "subsidiary" holdings operated as part-time farms produce a very appreciable proportion, currently over one-fourth of the Soviet gross farm output. They fill a considerable gap in Soviet food requirements that the socialized farming sector is presently unable to do.

In the following pages, the legal foundations of the private farming operations within the socialist system of sovkhozes and kolkhozes 2/ are discussed. The historical development of the private sector is

- 
- 1/ The assistance of departmental colleagues Professor R.L. Christensen and Professor J.W. Callahan in improving the clarity of presentation and style is gratefully acknowledged. Thanks are due to the Journal's reviewer, Dr. Roger S. Euler, U.S.D.A., for a detailed review and for suggesting several changes.
- 2/ Sovkhoz is the abbreviation of the Russian words for Soviet (state) farm, while Kolkhoz is abbreviated from the Russian words for collective farm, a pseudo producers' cooperative. Sovkhoz workers are state employees and draw state regulated wages. Kolkhoz members are residual claimants of their cooperative farm income and do not receive predetermined wages or salaries although at present regular monthly advances are paid. The author wished to use these Russian terms as it has become customary to emphasize the conceptual difference that the state farm or collective farm connote to the western reader.



reviewed, and its nature, present position, structure and importance are discussed and analyzed. Finally, the most likely future of the private sector within the Soviet socialist system is considered.

#### Legal Foundations and Historical Development

The private sector within Soviet agriculture is composed of the farming activities on the subsidiary enterprises of the households of two groups of individuals: (1) the kolkhoz members or "kolkhozniks" (who are not considered workers by Soviet definition) and (2) workers and employees of the state farms and other sectors of the economy. Of the two, the output of the kolkhoz members' individual household plots or subsidiary holdings is still dominant although the output in the other group has been increasing more recently.

Legal foundations and traditions of the present form of private farming developed in the Soviet Union during the 1930's along with the creation of the socialist organization of agriculture. It had its beginnings during the turbulent period of forced farm collectivization in 1929 and 1930 that had not totally calmed down with the advent of World War II. Ironically, the collectivization created a new, although radically reduced and different private sector in agriculture.

Initial collectivization plans did not provide for any private production activities within the collective farms. All means of farm production -- land, equipment, livestock, seeds etc. -- were to be expropriated and collectivized into socialist collective farms, kolkhozes. Even the village paupers had to turn over to the collective farm their single cow, a piglet or a few poultry with some unpredictable consequences -- they were exasperated and outraged. Since the village paupers were the primary social stratum on which the Communist Party had relied in the countryside, Party plans for collectivization and the success of the entire operation suddenly appeared in doubt. A major part of the rural population turned resolutely against the Party, and the collectivization of agriculture.

The Party was forced to make concessions and changed its tactics. The result was the famous article by Stalin, "Dizziness from Success", in which the blame was falsely put on the excesses of local functionaries who allegedly had gotten dizzy from the success of their own undertaking [4, p. 448-50]. One important concession made, at that time, was the introduction in February, 1930, of amendments in the kolkhoz model charter which would allow kolkhoz members to retain for private use a household vegetable plot of up to 0.5 hectare (1.25 acres), under special circumstances up to 1.25 hectares (over 3 acres), a cow, a sow and piglets, sheep, goats, and poultry [8, p. 184-85]. This was defined as a subsidiary holding to satisfy primarily family food requirements. This provision for a part-time subsidiary holding was ultimately incorporated into the successive kolkhoz (in Russian artel') model charters and became the legal basis for the private enterprise sector in socialist agriculture. This stipulation was considered so important that it was also included in the 1936 constitution of the U.S.S.R. (Chapter I,



article 7), and is now also a part of the constitutions of all Union republics. In 1969, when a major revision of the kolkhoz model charter was undertaken, the major provisions for private farming remained virtually unchanged except for minor modifications in plot size.

Small private gardens for workers and employees became prominent as a means of survival during the 1918-1920 Civil War years. Since the socialist system has never been able to supply the population with sufficient potatoes, fruits and vegetables, the workers' and employees' vegetable plots have continued to serve as a source of supply for their family needs. They received a new impetus during World War II [11, p. 288-89].

It must be pointed out that a large proportion of the last described subsidiary holdings belong to the sovkhos workers and employees who operate their garden plots in close association with large scale socialist agriculture. Urban workers and employees frequently have their subsidiary holdings in suburban cooperative horticultural colonies combined with small weekend cottages. As opposed to kolkhoz members, agricultural, including state farm and industrial workers are allowed to use only up to .15 hectare (about .40 acre) of land per family.

There are two schools of thought among Soviet agricultural economists and political ideologists with respect to individual subsidiary holdings. One school insists that these holdings should be considered truly transitory, not reconcilable with the socialist philosophy and economic system, and that ultimately they should be squeezed out of existence by restrictive policies. This school gained momentum during the Khrushchev era, and considerable administrative pressure was put on individual holdings in the early 1960's. The result was widespread food shortages, particularly shortages of vegetables, potatoes, and livestock products in urban centers. These shortages frequently led to workers' sit-down strikes, protests of housewives, and other signs of food unrest, something truly extraordinary under Soviet socialism. It is generally believed that this mistaken policy contributed to Khrushchev's fall in 1964.

The other school of thought, more realistic and less ideologically influenced, has been prevalent since the present Brezhnev-Kosygin administration assumed power in late 1964. This school recognized the vital importance of individual subsidiary household plots as suppliers of certain horticultural and livestock products which the socialist sector has not been able to supply. As a consequence, many restrictions in production and trade in the private sector of Soviet farming were rescinded after 1964 and declared harmful to the Soviet food supplies. Moreover, production on individual household plots was encouraged outright, and some grain and concentrated mixed feeds were made available from government stocks for private livestock.

Historically, private household farming was subjected to excessive taxes and irrational delivery quotas, often of products that were not produced [8, p. 301, 329]. Most of these burdens were abolished after Stalin's death and in the 1970's these are only unpleasant memories.

### Extent and Characteristics of Private Farming

The extent of private farming in Soviet agriculture is strictly defined by kolkhoz model charter and other land use regulations. Land in private use is limited to 0.5 hectare (1.25 acres) per kolkhoz members household and to 0.15 (0.40 acre) per household of all other agricultural and industrial workers and employees. There are a few exceptions to this latter limit: former kolkhoz members who have become sovkhos workers or employees through kolkhoz mergers with sovkhoses, or through conversion of kolkhoses into sovkhoses, are allowed to retain their old household plots of up to 0.5 hectare. Also, retired military officers are granted building lots of up to 0.5 ha for generals and admirals, and up to 0.3 ha (.75 acre) for other officers [12, p. 66, 69]. Until 1956, these allowances were 1.25 and 0.50 ha, respectively. To supplement their modest retirement income and attracted by high fruit and vegetable prices, such retired persons are typically engaged in "large scale" private farming, particularly around larger cities such as Moscow and Leningrad [13, pp. 112ff.].

Maximum livestock numbers are also prescribed by the model kolkhoz charter and other directives. Use of hired labor in farming the household plots is forbidden.

### Land in Private Use

While the kolkhoz farmers were historically, and still are, the principal segment of private producers, contributing the largest share of private marketable farm products, workers and employees also use a considerable amount of land. Over the last 15-16 years a noticeable shift among various private land user groups has taken place. The share of kolkhoz farmers declined from 6.3 million hectares or 87 percent of all land in private use in 1955 to 3.6 million hectares and 57 percent respectively in 1971 (Table 1). At the same time land used by farm and industrial workers and employees increased from 900,000 hectares or 12 percent of the total to 2.5 million hectares or 39 percent of the total in private use. About a quarter million hectares or 4 percent of private land is being used by rural non-farm workers such as village teachers, physicians, nurses and other municipal employees. Their garden plots are typically allocated from kolkhoz land resources since they usually reside within kolkhoz boundaries.

The reason for this shift in private land use is the rapid merger of kolkhoses with sovkhoses and direct conversion of kolkhoses into sovkhoses as a farm and land use policy measure. During this merger period of the Khrushchev era, cropland acreage in sovkhoses increased from just under 30 percent of the total in 1958 to over 45 percent in 1965, while the acreage in kolkhoses declined correspondingly from 66 percent to just over 50 percent. The number of kolkhoz farmers' households declined from 18.8 million in 1958 to 15.4 million in 1965.



Table 1  
Arable Land in Private Use by Groups of Users  
Soviet Union, 1955-1971

	1955		1960		1965		1970		1971	
Kolkhoz member house-holds, millions	19.8		17.1		15.4		14.4		14.1	
	ha*	%	ha	%	ha	%	ha	%	ha	%
Kolkhoz members' house-hold plots, 1000 ha	6300	87	4700	73	4000	65	3800	58	3600	57
Workers' and employees' in kolkhozes, 1000 ha	n.a.		n.a.		230	4	250	4	270	4
Other workers' and employees' garden plots, 1000 ha	900	12	1700	27	1900	31	2500	38	2500	39
Private farms, 1000 ha	40	1	(10)	..	...		...		...	
Total in private use, " "	7240	100	6410	100	6130	100	6550	100	6370	100

Source: Narodnoe khoziaistvo SSSR, (statistical yearbook), respective years; the latest 1922-1972 (Moscow, 1972), pp. 237,263. For previous years, see corresponding table on farm land.

Table 2  
Utilization of Land in Private Use by Principal Crops  
Soviet Union, 1950-1971

	<u>1950</u>		<u>1960</u>		<u>1965</u>		<u>1970</u>		<u>1971</u>	
	----- Million hectares -----									
Sown area, total S.U.	146.30		202.99		209.10		206.65		207.30	
Sown area in private use	9.37=100		6.75=100		6.60=100		6.73=100		6.70=100	
Sown area in private use percent of total	6.41%		3.97%		3.16%		3.25%		3.23%	
<u>In private use:</u>	<u>ha*</u>	<u>%</u>	<u>ha</u>	<u>%</u>	<u>ha</u>	<u>%</u>	<u>ha</u>	<u>%</u>	<u>ha</u>	<u>%</u>
Sown area in grains	3.58	38	1.22	18	1.08	16	1.08	16	1.00	15
Sown area in technical crops	0.21	2	0.12	2	0.07	1	0.07	1	0.07	1
Sown area in potatoes and vegetables	5.14	55	5.01	74	5.05	77	5.17	77	5.07	76
Sown area in feed crops	0.44	5	0.40	6	0.40	6	0.41	6	0.54	8

Sources: Sel'skoe khoziaistvo SSSR, 1970 (Moscow, 1971), pp. 112-113;  
Narodnoe khoziaistvo SSSR, 1922-1972 (Moscow, 1972), pp.240-241.

\*ha = hectare, 2.47 acres



Average plot size per kolkhoz member household declined from 0.32 ha (0.86 acre) in 1955 to 0.26 ha (0.65 acre) in 1965 and remains at this size at present. Two observations are in order: first, the size of average household plot declined by about one-fifth during the 1955-65 decade, probably as a result of restrictive policies. Second, the average plot sown with crops is much less than the 0.5 ha permitted by kolkhoz statutes, even though house lot and land under yard and other buildings (usually old farmsteads) must be deducted from the allowable maximum. A further reason explaining the average household plot size is the fact that some younger families are not using this privilege. Recent improvements in kolkhoz incomes and wages have made subsidiary farming less urgent as a means of income support. And the privilege of household plot can not be transferred or leased.

There is no information on the number of workers' and employees' households using garden land, nor the actual size of their household plots. The millions of private household farmers include about 14 million active kolkhoz members plus an unknown number of retired members, about 9 million sovkhos workers and possibly about another 25 to 26 million nonfarm workers and employees. Wadekin [13, p. 81] entitles one chapter of his book "Fifty Million Small-Scale Producers". The title may be primarily symbolic but it appears to be a close estimate.

#### Private Land Use Pattern -- Crops Grown

As might be expected, the major portion of the household land is used for labor intensive crops - potatoes, vegetables, fruits and berries. It is the best use of the limited land resources and frequently abundant family labor. Furthermore, large scale socialist farms have thus far demonstrated their inability to supply these products in adequate quantities. Thus, any surpluses from household plots have found ready, and often lucrative, market in nearby urban areas or in intra-village trading.

Over the last decade about 74-77 percent of private household land was devoted to producing potatoes and vegetables, with four-fifths of this producing potatoes (Table 2). Fruits and berries are not shown separately, probably because of statistical difficulties. In small household gardens, fruit trees and berries are usually inter-cropped with potatoes and vegetables. In 1970, private household plots reported 1.5 million hectares (3.7 million acres) in fruit trees and berries. Some grain crops (15 percent of household land) and feed crops (8 percent) were also recently grown on household plots. Specialized industrial crops (tobacco, cotton, flax, sugar beets, sunflowers and others) have almost disappeared from private garden land.

#### Structure and Role of Private Farming

At present, private farm output is contributing about 30 percent to the nearly 90 million ruble Soviet gross farm output [7, pp. 263, 275]. It is also estimated that the private subsidiary holdings occupy a labor force of over six million people, exclusively members of households,

throughout the year or nearly one-fifth of the total agricultural labor force. Household plot crop harvests represent about one-third (35 percent) of the total private farm output while livestock products make up two-thirds.

As the household land use pattern has shown, crop production in the private sector is concentrated on a few labor intensive crops such as potatoes, vegetables, fruits and berries. In these crops the private households have frequently produced 40-50 percent or more of the total individual crop output and the share has declined only slightly in recent years (Table 3 and Figure 1).

#### Private Crop Production and Its Market Share

Potatoes and vegetables traditionally occupy about three-fourths of the crop acreage in private household farming. This acreage has been stable since 1950 with slightly over 5 million hectares (12.5 million acres) and the private share accounts for about 50 percent of the total acreage. Over the last decade, the private share has increased a little since the total acreage declined over 10 percent during this period, and the drop occurred primarily in the socialist sector.

Potato output from the private sector represents the highest share of any farm product. It was 73 percent in 1950, has declined about 10 percentage points and stabilized at 63-65 percent since 1960 (Table 3 and Figure 1). Vegetable output of the private sector is also relatively high. It represented 44 percent of the total in 1950 and 1960 and has declined to 37 percent in 1971.

Potatoes and vegetables are the leading cash crops for private household farming while substandard tubers and vegetable tops supply substantial livestock feed. Until 1960, potatoes from household plots represented over half of the total market supplies but have declined to about 40 percent in most recent years. Vegetables from private plots contributed about 12-14 percent of the market supplies since 1960. Their share was somewhat higher prior to 1960 (Table 3 and Figure 1).

Fruits and berries, including some citrus fruits, represent another significant product of the private farming. Household plots accounted for 31 to 40 percent of the national fruit and berry acreage, and 38 to 43 percent of total output in the late 1960's (Table 3). There is no published information available on the private sector's market share but it can be assumed that it is substantial. It is probably only a shade less than the proportion of output, or an estimated one-third of the total market supplies of fruits and berries.

Grape production is largely concentrated in large socialist farms, more recently primarily in sovkhozes. Only 13 percent of vineyards was in household plots but this acreage produced 19 to 23 percent of grapes in the late 1960's, indicating a considerably higher productivity in the private sector. No information is available as to how much of the private



Table 3  
Comparative Shares and Trends of the Private Farming  
Sector in the Soviet Union, 1940-1971

	<u>1940</u>	<u>1950</u>	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1971</u>
	----- Percentages of national totals -----					
<u>Means of production</u>						
Arable land sown	13.1	6.4	4.0	3.2	3.3	3.2
Potato and truck crop acreage	53	49	45	48	50	50
Fruit and berry orchard acreage	n.a.	n.a.	n.a.	31	40	n.a.
Vineyards acreage	n.a.	n.a.	n.a.	13	13	n.a.
Milk cows	75	66	47	41	38	37
Hogs	58	35	26	30	25	22
Sheep	42	16	22	21	21	20
Goats	75	53	82	84	81	81
Fowl	89	78	74	71	58	n.a.
<u>Total output</u>						
Potatoes	65	73	63	63	65	63
Vegetables	48	44	44	41	38	37
Fruits and berries	n.a.	n.a.	n.a.	38	43	n.a.
Grapes	n.a.	n.a.	n.a.	19	23	n.a.
Milk	77	75	47	39	36	35
Meat (dressed wt.)	72	67	41	40	35	35
Eggs	94	89	80	67	53	50
Wool	39	21	21	20	19	20
<u>Market share</u>						
All farm products	27	24	15	13	12	11
All crop products	13	14	11	11	8	8
Potatoes	54	61	51	45	40	39
Vegetables	18	24	14	12	13	13
All livestock products	56	43	19	15	14	12
Milk	51	50	10	7	5	5
Meats	55	47	20	17	17	18
Eggs	93	74	54	36	19	16
Wool	26	16	15	14	15	16

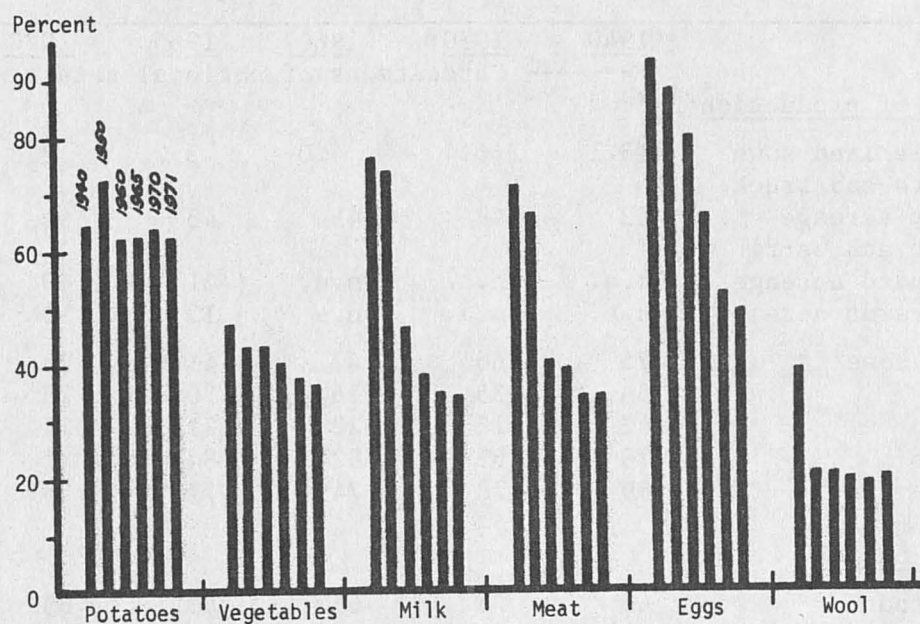
n.a. = not available

Source: Narodnoe khoziaistvo SSSR, 1922-1972 (Moscow, 1972), p. 225-227, 240-241, 257.

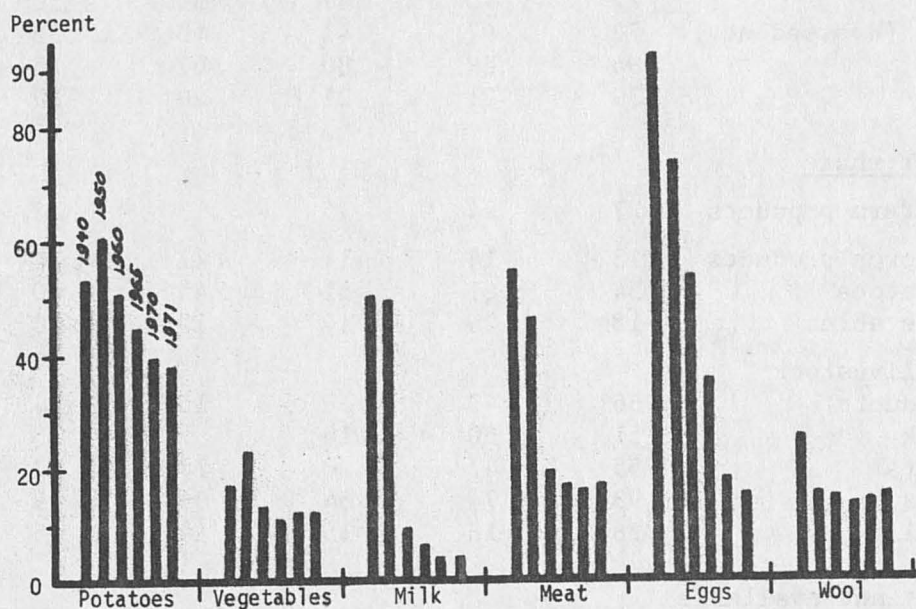


Figure 1

OUTPUT SHARES OF SELECTED PRODUCTS OF PRIVATE FARMING  
SOVIET UNION, 1940, 1950, 1960, 1965, 1970 & 1971



COMPARATIVE MARKET SHARES OF PRIVATE FARMING OUTPUT  
SOVIET UNION, 1940, 1950, 1960, 1965, 1970 & 1971



grape output was marketed.

While the market share of all private farm products amounts to 11 percent, private crop products represented 8 percent of the total crop products market supplies in 1970 and 1971, down from 14 percent in 1950 (Table 3).

In summary, these figures demonstrate convincingly the great importance of privately produced potatoes, vegetables, fruits and berries in Soviet food supplies -- for private households themselves and commercially. In the past, supplementary food supplies and incomes from sales of products from private household plots were the primary means of survival for a large majority of kolkhoz farmers.

#### Private Livestock Production and Its Commercial Significance

Livestock production accounts for about two-thirds and crops one-third of the total private farm output or just about one-fifth of the value of Soviet gross farm output. In monetary terms this represents 16-18 million rubles worth of output. It is a mystery to many how the household plot farmers are able to produce such a high proportion of total farm output on only 3 percent of the cropland.

The explanation is simple. The household plot livestock farmers, mostly kolkhoz members, but a considerable number of others, are not self-sufficient operators on their small plots. They are in many ways inter-dependent with their primary employers, the large-scale socialist farms and depend on them for most of their livestock feed and virtually all pasture. This dependency is formally established and defined in the kolkhoz model charter, Chapter X, article 43, as follows: "The collective farm board gives the kolkhoz members assistance in the acquisition of livestock, furnishes veterinary service, and also provides feed and pasture for livestock" [10, p. 224].

In the past, hay, straw, grain and occasionally even silage, was given to the kolkhoz members as part of wage payment "in-kind" for their labor contribution to the socialist farm. Later, the "in-kind" wage payments were discontinued, as many members were not interested. Now, kolkhoz members and sovkhoz workers are entitled to purchase feeds from the kolkhoz or sovkhoz management. Also, isolated hay or pasture land patches, (especially along the edges of roads, fields and ditches) that are difficult for the large-scale farm to exploit economically, are frequently turned over to kolkhoz members for making hay and pasturing their private livestock. In passing, it is appropriate to point out that feed sales from socialist farms to the private sector constitutes one of the double accounting instances in Soviet estimates of their gross farm output. An estimated one-half of private livestock feed is purchased from the socialist sector [6, p. 44].

Thus, private livestock farming is largely at the mercy of the socialist farms. Their management can refuse pasture rights or feed



sales at any time. Such actions may be disciplinary measures if members' work performance on socialist farm leaves something to be desired, or if high level administrators direct such actions. Historically, the kolkhoz members have experienced harsh treatment, and it may be expected again in the future.

However, since the fall of Khrushchev, private livestock farmers have received encouragement to produce more within the permitted limits, and all repressions on them have been declared, if not illegal, then anti-Leninist. Moreover, there are some indications of disappointment among high Party functionaries that the private sector has not reacted to the encouragement vigorously enough as shortages of livestock products, and fruits and vegetables have occasionally appeared [13, p. 353].

Livestock numbers in private possession have been rather stable since about 1960. The proportion of livestock in private hands, however, has shown at the same time, a consistently declining trend (Table 3) since the socialist sector has expanded livestock numbers rather noticeably. Prior to 1960, different types of livestock in the private sectors exhibited different trends. While all private cattle and milk goats declined over the 1950-1960 period, milk cow numbers increased slightly, hog and fowl numbers nearly doubled and sheep more than doubled.

It is worth noting that more than a third or about 15 million milk cows are owned privately, somewhat more than the total number of 14 million kolkhoz member households. The private sector also owns over 20 percent of hogs, just about 20 percent of sheep, but still over 80 percent of milk goats, although their number has declined by one half since 1950.

Livestock products output in the private sector largely reflects the trend and proportion of livestock numbers in that sector with only minor deviations. Private livestock has proved frequently more productive, in other cases less productive than in the socialist farms.

Milk output in the private sector fluctuated at around 29 million tons a year since 1960 but its share of the total declined from 47 percent to 35 percent during that same period (Table 3 and Figure 1). Milk is the only major livestock product, where Khrushchev's goal "to catch up with and pass the United States in per capita production" has been realized (assuming that the Soviet official statistics can be trusted). The U.S. produced about 575 lbs. of milk per capita in 1971 compared with about 740 lbs. per capita in the Soviet Union. However, in the Soviet Union a smaller proportion is available for human consumption because a large proportion of milk is used for raising calves and feeding piglets, and also because of limitations in the system for collecting, processing and distributing milk.

Meat, pork and poultry output in the private sector represents about 35 percent of the total (Table 3). Although volume increased from 3.6 to 4.6 million tons since 1960, the proportion of the total declined



from 41 to 35 percent in 1970 and 1971. The Soviets have established large scale industrial type pig feeding and broiler farms in recent years, thus increasing the role of the socialist sector in pork and poultry production.

Egg output in the private sector has been rather stable over the last decade but the 22 to 23 billion eggs produced represented only 50 percent of the total, the highest proportion among the major livestock products in 1971. In 1950, the private sector supplied 89 percent of eggs. Rapid development of large industrial poultry farms with imported western egg laying breeds is responsible for the recent relative increase of egg production in the socialist sector. Such specialized socialist poultry "factories", as the Soviets affectionately call them, frequently have hundreds-of-thousands of laying birds.

Wool is mostly produced in large sheep farms on Central Asian mountainous range lands. Consequently, the private sector accounted for only 19 to 21 percent since 1960. This proportion has been rather stable although sheep numbers more than doubled over that period in the private sector and nearly doubled in the socialist sector.

Honey production is of minor significance. However, the private sector produced 51 to 61 percent of total honey output, or a little over 100,000 tons a year.

It should be mentioned that the private sector also dominates rabbit production with over 93 percent of the stock, owns over 65 percent of buffalos, but only 13 percent of reindeers and 40 percent of camels. Horses have nearly disappeared in the private sector but well over 90 percent of donkeys and about 75 percent of mules are privately owned. The latter are concentrated mostly in the Central Asian republics.

The market share of private livestock products is much lower than the output share for obvious reasons. Subsidiary holdings exist primarily to serve family needs. Consequently, much of the output is consumed by the family even in kolkhoz households where the major part of private livestock output and market supplies originates. The socialist farms have the primary responsibility of supplying the markets.

According to Soviet estimates in recent years, about 12-14 percent of all livestock products marketed have come from the private sector. This proportion was 19 percent in 1960 and 43 percent in 1950, a trend which underlines the rapid growth of the socialist sector (Table 3). Only 5 percent of milk marketed originated in the private sector in 1970 and 1971 while 16 percent of eggs and wool and 17-18 percent of meat was supplied from that sector (Figure 1).

#### Economic Position of Private Farming

Since private farming in the Soviet socialist system is an unwanted, or transitory, aspect of life, if not a necessary evil, statistics on

its economic role beyond aggregate totals are extremely scarce. Even the private sector totals frequently have to be computed as the differences between the national totals and that reported for the socialist sector -- kolkhozes, sovkhoses and other state farms. No input information is available on private farming except on estimated labor and land input.

The monetary value of private farm output has been slowly increasing over the 1960-1970 decade and was about 28 million rubles in 1970 and 1971 compared with nearly 24 million in 1960 (Tables 4 and 5). The share of private farming, however, declined during this period from 38 to 32 percent of the total. The proportion is overstated by an estimated 2 to 4 percentage points because the sovkhoses total does not include the "other state farms" which represent about 10 percent of the state sector total.

Table 4  
Value of Agricultural Gross Production, Soviet Union 1950-1971  
In billion rubles (1965 prices).

	<u>1950</u>	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1971</u>
Total	39.3=100%	63.0=100%	70.9=100%	87.0=100%	87.9=100%
Sovkhoses		11.6 18	16.9 24	24.3 28	25.0 29
Kolkhozes		27.8 44	29.0 41	34.6 40	34.5 39
Private sector					
(subsidiary holdings)		23.6 38	25.0 35	28.1 32	28.4 32

Source: Narodnoe khoziaistvo SSSR, 1922-1972, (Moscow, 1972), p. 216-217, 263, 275.

Note: The private sector, computed as a residual, is 2-4 percentage points overstated, because the sovkhoses here do not include other state farms (schools, experiment stations et. al.) and are included in the residual.

As indicated previously, the private sector in recent years has contributed about 11-12 percent of the value of all farm products marketed (Table 3) or considerably less than the nearly 30 percent share of total production. Karnauhova estimates for 1965-67 that the private sector marketed 24 percent of its output while kolkhozes and sovkhoses at the same time marketed 68-69 percent [6, p. 45].

Kolkhoz farmers' subsidiary holdings are the prime suppliers of farm products marketed from the private sector, but their exact role is not known. Because of the recent structural changes the kolkhoz farmers' share has declined but it still probably accounts for about 65 to 70 percent of the private sector total. Many sovkhos workers who were members of kolkhozes merged recently with sovkhoses, were allowed to retain



their previous larger kolkhoz household lot allotments, are also able to produce above the family needs for market.

Table 5  
Growth Rates of Agricultural Production by Types of Farms, 1960-1971  
1960=100

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1971</u>
All farms	100	112	138	140
Kolkhozes and sovkhozes	100	118	151	153
Kolkhozes only	100	116	146	148
Private subsidiary holdings	100	102	114	114

Source: Narodnoe khoziaistvo SSSR, 1922-1972 (Moscow, 1972), p. 221.

Income from private farming for kolkhoz members is not reported. It is estimated that until 1960, the kolkhoz members derived the major part of income and livelihood from their household farming. Since 1960 cash distributions in the kolkhoz socialist sector approximately tripled -- from 1.40 rubles to 4.03 rubles a day in 1971, or from 300 to about 900 rubles per kolkhoz farmer a year -- it can be estimated that at present the income from household farming is less important than the income from the kolkhoz collective operations [8, p. 263].

Labor productivity in household farming appears to be high, if not higher than in the socialist sector, although hand labor predominates and few operations are mechanized. Karnauhova reports that in 1965-67 private household farming employed about 6.3 million people or nearly 19 percent of the total agricultural labor force [6, p. 45]. She also gives labor productivity data for the socialist sector: 2764 rubles worth of output per man-year in sovkhozes, and 1820 rubles in kolkhozes [6, p. 45]. She does not show any productivity data for the private sector but the total value of output of 22.8 million rubles divided by 6.3 million people employed yields 3610 rubles worth of output per man-year, or a considerably higher labor productivity than in the socialist sector.

Admittedly, part of the higher labor productivity is accounted for by the purchased feeds from the socialist sector. Also, high priced livestock products constitute two-thirds of the private farming output compared with 50 percent for the Soviet Union total.

#### The Future of Private Farming in Socialist Agriculture

According to the Soviet communist belief, private farming is tolerated only during the transitional stage from socialism to true communism.

In the last program of the Communist Party of the Soviet Union the outlook of private household farming is defined as follows [ 9, p. 89].

"At a certain point the collective production at kolkhozes will achieve a level at which it will satisfy fully members' requirements. On this basis, supplementary individual farming will gradually become economically unnecessary. When collective production at the kolkhozes is able to replace in full production on the supplementary individual plots of the kolkhoz members, when the collective farmers see for themselves that their supplementary individual farming is unprofitable, they will give it up of their own accord."

This clearly shows that Damocles' sword is hanging over private household farming. One day the Party may declare that the "certain point" has arrived where the collective production of kolkhozes is considered to "satisfy fully members' requirements" and the well-known "voluntary-by-compulsion" abandonment of household farm production will be imposed upon kolkhoz farmers.

Despite the eagerness and, at times, impatience, to reduce or eliminate private farming, the hard fact of present day Soviet reality is that at least 25-30 percent of farm products come from private farming. While its importance has diminished in recent years, output from the private sector looms particularly large in critical areas where collective and large-scale state farms have clearly demonstrated their inability to cope with the problem of supplying needed products. Potatoes and fruits and vegetables are typical examples. The day has not yet arrived "when collective production at the kolkhozes is able to replace in full production on the supplementary individual plots of the kolkhoz members". And some students of Soviet agriculture believe that the bothersome private sector in the Soviet agriculture will continue to exist at least during the next two decades, and maybe to the end of this millennium.



Selected Bibliography and References

1. Antons, Richard, Edit., 1960. Põllumajandusalaseid direktiive, seadusandlikke ja ametkondlikke akte, I ja II (Directives, Legal Acts and Ordinances Regarding Agriculture I & II). Tallinn: Eesti Riiklik Kirjastus.
2. Belov, Fedor, 1955. The History of a Soviet Collective Farm. New York: Praeger.
3. Bolgov, A. V., I. A. Borodin, E. S. Karnaukhova, Editors, 1965. Ekonomika sotsialisticheskogo sel'skogo khoziaistva (Economics of Socialist Agriculture). Moskva: Izdatel'stvo Ekonomika.
4. History of the Communist Party of the Soviet Union, 1960. Moscow: Foreign Languages Publishing House.
5. Jarvesoo, Elmar, 1973. "Progress despite collectivization: Estonian agriculture", Problems of Mininations: Baltic Perspectives. New York: AABS, pp. 137-149.
6. Karnaukhova, J. 1971. Põllumajanduse sotsialistlik ümberkujundamine (Socialist reconstruction of agriculture). Tallinn; Kirjastus Eesti Raamat.
7. Narodnoe Khoziaistvo SSSR 1922-1972. Iubileinyi statisticheski uezhegodnik (National economy of the USSR. Statistical yearbook). Moskva: Izdatel'stvo Statistika, 1972.
8. Nove, Alec, An Economic History of the U.S.S.R. Baltimore: Penguin Books, 1969.
9. Program of the Communist Party of the Soviet Union, 1963, New York: International Publishers, pp. 143.
10. Stuart, Robert C., 1972. The Collective Farm in Soviet Agriculture. Lexington, Massachusetts: C. D. Heath & Company.
11. Volin, Lazar, 1970. A Century of Russian Agriculture: From Alexander II to Khrushchev. Cambridge, Massachusetts: Harvard University Press.
12. Wadekin, K. E., 1967. Privatproduzenten in der sowjetischen Landwirtschaft. Köln: Verlag Wissenschaft und Politik.
13. Wadekin, Karl-Eugen, 1973, The Private Sector in Soviet Agriculture Berkely, Los Angeles, London: University of California Press.