

**RECENT DEVELOPMENTS
IN SOVIET AGRICULTURE**



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FOREWORD

The Soviet leadership is becoming increasingly concerned with stagnation in the agricultural sector, a sector that employs about one-half of the labor force in the USSR. Of 33 formal public speeches made by Khrushchev in 1961, 16 were devoted exclusively to agricultural problems, and, during the year, Khrushchev spent a total of 32 days on personal inspection tours of the main farming areas.

Soviet agricultural problems embrace several basic, interrelated policy issues, as follows: the position of agriculture in the scale of national priorities; the roles of Party officials, managers, and technical specialists in agricultural administration; land use; and the continued low level of collective farm income. These issues are discussed in this report, the agricultural situation is investigated, and the current Party programs intended to stimulate Soviet agriculture are evaluated.

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RECENT DEVELOPMENTS IN SOVIET AGRICULTURESummary and Conclusions

The stagnation of Soviet agriculture during the first 3 years of the Seven Year Plan (1959-65) has led the USSR to a two-pronged effort to raise output. The more important move is a planned shift in the cropping pattern during the next few years over an area of 41 million hectares* (about 20 percent of the total sown area in 1961), a shift that will virtually eliminate the grass-rotation system and severely restrict the practice of clean fallowing. The objective of this move is to increase the supply of meat and milk by stepping up livestock feed supplies. The second facet of the new program, and one less likely to boost output, is the reorganization of agricultural administration, which puts the Party machinery firmly in control of agricultural production. Opposition to the elimination of the grass-rotation system may have generated the decision to provide a clearer delineation of authority and an integral role for the Party in agricultural administration.

Khrushchev claims to have discovered certain "hidden reserves" in arable land. These reserves actually are the 64 million hectares in sown perennial grasses, oats, and clean fallow, 41 million hectares of which are now to be shifted to cultivated crops -- corn, peas, field beans, and sugar beets. Khrushchev's new proposal is a radical move. Because of the shortage of mineral fertilizers, as well as of farm machinery, sown perennial grasses in the crop rotation provided economical feed while at the same time returning nitrogen to the soil (the so-called "ley system"). Clean fallowing is designed to increase and stabilize crop yields in semiarid regions by restoring soil moisture.

In 1962 the total sown area was expanded by 11 million hectares, or about 5 percent. In addition, about 16 million hectares in grass and oats were shifted to other crops. Because some production was already being obtained from the area formerly in grass and oats and because harvesting delays seem likely to reduce yields somewhat, it is expected that the net increment to production in 1962 resulting from the expanded sown area and Khrushchev's change in the cropping pattern probably will be no more than 5 percent, given average weather conditions.

* One hectare equals 2.471 acres.

Over the next few years, as additional land is brought under continuous cultivation, further increases in output are possible. These increases will entail a large increase in the volume of fieldwork. In the long run, however, the new program is likely to be self-defeating as soil moisture and nutrients are exhausted. For these reasons, the Soviet leadership is embarking on no more than a stopgap that provides no permanent solution to improving the quality of the Soviet diet.

For Western observers the task of appraising progress in Soviet agriculture is made more difficult by the questionable validity of Soviet statistics. In particular the official data on production of grain in recent years appear highly inflated compared with the historical series. There appears to be a greater degree of falsification in the statistics on production of meat in 1961, particularly those for the private sector, than in previous years. Finally, the reported large increases in livestock herds do not tally with the estimated availability of feed. In summary, the unsatisfactory agricultural situation is believed to have caused some deterioration in the quality of the average Soviet diet in recent years, and the accuracy of Soviet statistics may have suffered in an effort to obscure this fact.

The reorganization of agriculture in 1962, which followed the Party Plenum in March, clarifies responsibility and formalizes Party authority in an attempt to make centralized control more effective. This proliferation of the control apparatus is not expected to have a favorable effect on production of crops or livestock. The administration of agriculture is now vested in an All-Union Agricultural Committee with subordinate committees at the republic and oblast levels. The execution of the policies and decisions of these agricultural committees is carried out by Ministries of Production and Procurement at the republic level, Directorates of Production and Procurement at the oblast level, and Interrayon Production Directorates at the local level.

In spite of indications that additional investments will be made available to agriculture and agriculture-supporting industries, it is evident that agriculture will not be given a priority position equal to defense or heavy industry. Additional investments in the kolkhoz (collective farm) sector will have to come from internal sources. The financial situation of the kolkhozes, however, has been improved somewhat by reductions in the prices for machinery, fuel, spare parts, building materials, and metal and metal products; tax concessions have been made on income received from production of livestock; loan periods for machinery purchased from machine tractor stations (MTS's) have been extended; interest rates have been decreased; and the state now pays all transportation costs for the delivery of agricultural products to procurement centers. In addition, prices for livestock purchased from

kolkhozes and individuals have been increased by an average of 35 per-
cent in order to stimulate the lagging animal husbandry sector, which
has been operating at huge losses on most farms.

I. Situation in 1961

According to the official Soviet index (which is believed to overstate the increase), gross agricultural output in the USSR in 1961 was only 5 to 6 percent greater than in 1958. Thus little progress has been made toward the 70-percent increase in gross agricultural production called for by the Seven Year Plan (1959-65).

The winter of 1960-61 in the USSR was unusually mild, with greater-than-average precipitation over most of the principal agricultural regions. Northern Kazakhstan and the Urals were the only important agricultural areas in which moisture was in relatively short supply at the beginning of the crop season. Also, spring in 1961 arrived early, with temperatures averaging much above normal during March and April. Crop prospects, which were judged to be better than average early in the crop season of 1961, tended to deteriorate slowly as the summer progressed. Less-than-average precipitation for periods of a month or more occurred during the growing season in most of the principal agricultural areas. Prospects for production of crops were judged to be about average by the end of the crop season.

Spring fieldwork was aided by the early arrival of warm weather in 1961. Spring planting, after an early start, was slowed by rains late in April and in May. Although the plan for spring seeding reportedly was overfulfilled, the sown acreage in the USSR in 1961 increased by less than 2 million hectares to a total of 205 million hectares. The acreage of grain crops, after having been reduced during the preceding 2 years, returned in 1961 to about the level of 1956-58. This increase in grain acreage was largely offset by a reduction in the acreage of forage crops. Small increases in acreage were reported for cotton, sugar beets, and sunflowers.

Soviet grain acreage in 1961 was about 128 million hectares. This total included 115 million hectares of small grain and 13 million hectares of corn, harvested either as fully mature grain or in the milky-waxy (silage) stage of maturity, with the ears being converted to a dry-grain equivalent.

Winter grains in the southern part of the European USSR benefited greatly from the mild, moist winter, and a bumper crop was produced. The spring wheat crop in much of the new lands, however, was damaged by drought. Also, dry weather during June and July in the southern part of the European USSR limited the yields of most late crops to about average levels.

The USSR claims that about 137 million tons* of grain were produced in 1961, 3 million tons more than were claimed in 1960 but still short of the record 141 million tons claimed for 1958. Soviet statistics on production of grain since 1958 appear to be highly inflated, although the reason or reasons for this inflation cannot be determined with certainty. Several factors that may account for part or all of the statistical inflation are the inclusion of excess moisture and trash in the grain, statistical manipulation or falsification by Soviet officials at the various administrative levels, an unannounced change in the definition of grain, or a change in the methodology used by the USSR in estimating the amount of grain that was produced.

Based on reports of crop conditions, on weather information, and on data on grain acreage, it is estimated that the total production of grain in 1961 was about 115 million tons, roughly one-sixth more than the estimated production in 1959 and 1960 but still short of the record harvest in 1958. The biggest change in production of any individual grain between 1960 and 1961 was in wheat. In 1960, largely because of extensive damage to winter wheat from winterkill and spring dust storms, a very small crop, estimated at 46 million tons of wheat, was produced. It is estimated that, in 1961, 55 million tons of wheat were harvested, a crop about equal to the 1955-59 average.

Output of cotton, sugar beets, fiber flax, and sunflowers in the USSR in 1961 is estimated to have been about average. Production of cotton, at 4.52 million tons of raw (unginned) cotton, was 5 percent larger than the mediocre crop of 1960 but still slightly less than the good crop of 1959. Cotton yields were somewhat lower than in any year since 1955. A total of about 63 million tons of sugar beets was produced. Of this amount, about 48 million tons were procured for processing by the sugar industry. Sugar beet yields in 1961 were somewhat below the average for 1956-60. Production of fiber flax in 1961 reportedly was 403,000 tons, a decline of 5 percent in comparison with the level of output in 1960.

The USSR claims that a record crop of 4.71 million tons of sunflower seed was produced in 1961, a crop about one-fifth larger than the crop for 1960 of almost 4 million tons. A crop this large is surprising in view of prevailing conditions. The increase in sunflower acreage in 1961 was only 20,000 hectares, an increase of less than 1 percent. Also, dry weather was experienced during the growing season over the main sunflower growing areas, a condition that does not appear to be consistent with the harvesting of near-record yields. The size of the sunflower seed crop, however, may have been determined before the onset of the dry weather.

* Tonnages are given in metric tons throughout this report.

Production of potatoes, vegetables, and livestock feed in 1961 was close to the average for recent years. The acreage in potatoes and vegetables was slightly smaller in 1961, and the acreage in fodder crops was about 5 million hectares less than the record 57 million hectares planted to these crops in 1960.

The USSR during 1961 claimed to have attained some limited success in its livestock industry. The success claimed, however, was confined primarily to a buildup of livestock herds. Increases in the number of livestock during the calendar year 1961 are shown in Table 1, and reportedly the increases in the number of cattle and swine represent the largest annual increment to these herds in the postwar period. These increases are surprising, for the feed supply from the growing season of 1961 appears to have improved little, if any, over that of a year earlier.

Table 1

Reported Number of Livestock in the USSR on 1 January
1961 and 1962

	<u>Million Head</u>		<u>Percentage Increases</u>
	<u>1961</u>	<u>1962</u>	
Cattle	75.8	82.1	8
Of which:			
Cows	34.8	36.3	4
Swine	58.7	66.6	13
Sheep and goats	140.3	144.4	3

The USSR claims that 8.8 million tons of meat were produced in 1961, an increase of about 1 percent in comparison with the 8.7 million tons claimed for 1960. It is believed, however, that production of meat in 1961 actually declined somewhat. The USSR has admitted officially that production of meat in the socialized sector in 1961 declined by about 8 percent, from 5.1 million to 4.7 million tons. Thus to reach the claimed total, production of meat from the private sector would have had to increase by 14 percent, from 3.6 million to 4.1 million tons. The past relationship between privately owned livestock herds and production of meat from the private sector does not suggest any such increase.

A total of 62.5 million tons of milk reportedly was produced in the USSR in 1961, an increase of 800,000 tons, or 1.3 percent, in comparison with output in 1959 and 1960. The number of cows continued to increase during 1961 and was 4 percent larger on 1 January 1962 than a year earlier. A reduction in milk yield per cow had a tendency to offset the increase in the number of cows.

The over-all supply of food in the USSR is sufficient to prevent nutritional deficiencies. The quality of the average diet, however, is believed to have deteriorated somewhat in the past several years. Khrushchev stated at the Party Plenum of March 1962 that "production of meat is behind the growth in demand." Fats and oils probably were in relatively short supply, but per capita supplies of fish and sugar were at record levels in 1961.

II. Falsification of Statistics

Western analysts of Soviet agriculture generally have agreed that there has been considerable exaggeration in the official Soviet statistics on production of some of the major agricultural commodities in recent years. As previously indicated, statistics on production of grain, in particular, appear to be highly inflated since 1958.* Also, official claims for production of meat and for the number of livestock in 1961, as well as for the sunflower seed crop, are suspect.

At the Party Plenum of January 1961, Khrushchev bitterly denounced the practices employed by dishonest persons in order to fulfill or overfulfill plans and pledges. Admissions of "fraud and deception" were made at the Plenum by most of the Party first secretaries from the constituent republics of the USSR. These confessions by top echelon Party leaders were indicative of the widespread nature of statistical falsification in agriculture. The full extent, geographically speaking, of the "fraud and deception" in agricultural reporting was revealed in a vigorous press campaign conducted for several months following the Plenum in January. Government and Party leaders from the farm level to at least the republic level, as in the case of Tadzhikistan, were implicated either directly or indirectly as knowledgeable of the deception. Statistical falsification generally was included among charges leveled against many government and Party leaders who were removed from office and even expelled from the Party after the Plenum in January.

The seriousness of the national scandal relative to statistical falsification was indicated by the issuance of a decree in May 1961 that invoked a prison sentence of up to 3 years for those persons

* I, p. 6, above.

guilty of making "inflated entries in state accounts or other deliberate distortions of accounts on the fulfillment of plans." In July 1961 the State Control Commission (Goskontrol) of the Council of Ministers, USSR, was reorganized as a union-republic agency "in connection with national economic tasks and the need to intensify checking on the execution of government decisions from top to bottom and to strengthen further state discipline." Among other duties this expanded commission was charged with "controlling the state of accounting and state reports and uprooting the padding of state reports, deceit, and hoodwinking."

The widespread falsification of statistics in recent years probably resulted in a significant upward bias, for most of the falsification was generated by pressures to fulfill or overfulfill plans or pledges. Downward revisions of some production statistics logically could have been expected at least for 1960. However, in two principal statistical handbooks published by the USSR in 1961 -- SSSR v tsifrakh v 1960 godu (The USSR in Figures in 1960), published in March 1961, and Narodnoye khozyaystvo SSSR v 1960 godu (The National Economy of the USSR in 1960), published in August 1961 -- no downward revisions were made in the production statistics for any of the major agricultural commodities except cotton. Downward revisions could not have been expected in the handbook published in March, for its publication preceded many of the public disclosures of statistical malpractices. In the handbook published in August, although the later date should have enabled control organs to audit some accounts and to make adjustments where necessary, production figures for many commodities as well as for the index of gross agricultural output were even higher than those published in the handbook in March.

Although small revisions, usually upward, are not unprecedented in Soviet statistics on agricultural production, the upward revision for such a large number of commodities in view of the disclosures of widespread falsification is most unusual. Soviet statistical policy, however, is clearly against making downward revisions in national statistics, as expressed recently in the Soviet statistical journal Vestnik statistiki, as follows:

... The perversions of accounting data by individual workers did not influence the over-all totals of statistical works, because the basic indices of the development of the national economy of the USSR are mutually controlled and made precise on the basis of comparability of the different sources and of all-round economic and statistical analysis. These national economic totals do not and cannot arouse any doubts.

Although this statement may be true for statistics on those commodities over production of which the Soviet government has complete control, it is not true for statistics on agricultural production, because such statistics are not easily verified by central authorities. The nature of production and utilization of agricultural products provides convenient opportunities for deception. Farm managers and other officials have many opportunities to manipulate the statistics, especially for the share of farm production that remains on the farm.

Furthermore, although the government has fairly firm statistical control over that part of agricultural production which it procures, collusion among procurement and other officials to pad the accounts cannot be completely controlled. That all cotton is procured by the state and that production statistics can be verified by ginning records did not prevent high-level collusion to falsify the data in Tadzhikistan.

III. Decreasing Importance of Collective Farms

At the meeting of the Supreme Soviet of the USSR in March 1958 that ratified the reorganization of machine tractor stations (MTS's), Khrushchev took the radical position that sovkhoses (state farms) should not be considered a higher form of socialist agriculture than kolkhozes and even went so far as to suggest that sovkhoses adopt the "democratic" procedures ostensibly inherent in the kolkhoz.* Khrushchev's theses on the Seven Year Plan, presented in November 1958, specifically limited the future growth of the sovkhos system by setting modest investment and procurement goals for this sector. In his report to the 21st Party Congress, held in January 1959, Khrushchev spoke of the need to develop both sovkhoses and kolkhozes and warned against forcing the merger of the two systems. Since the 21st Party Congress, Khrushchev has continued to speak of strengthening the kolkhoz system and furthering its development. In his report to the 22d Party Congress in October 1961, Khrushchev said that kolkhozes and sovkhoses will continue to develop side by side. The following month, at Tashkent, he repeated this policy, stating as a "principle" that he is against the conversion of "weak" kolkhozes to sovkhoses.

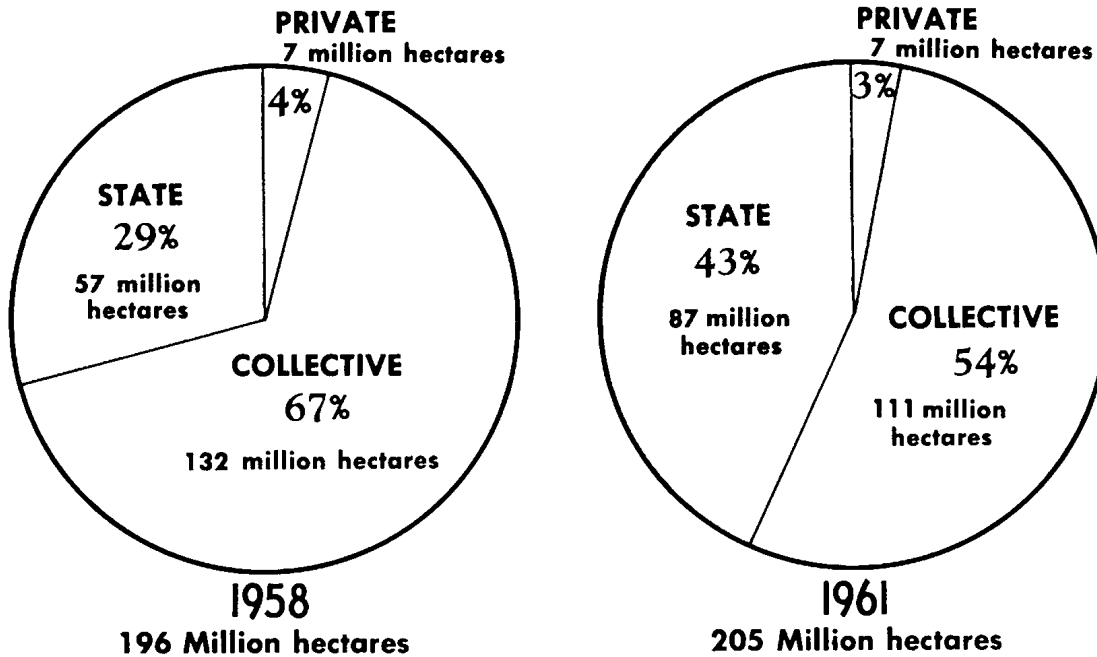
In spite of Khrushchev's reiterated support of the kolkhoz system, the conversion of kolkhozes to sovkhoses has been very rapid. The number of sovkhoses grew from 6,000 in January 1959 to 8,300 in January 1962, largely as the result of the conversion of kolkhozes to sovkhoses. During this period the state sector added 30 million hectares to its sown acreage, an increase of about 50 percent, while

* In March 1962, Khrushchev admitted that kolkhoz democracy is a fiction.

the sown acreage of the kolkhozes declined by 21 million hectares (see Figure 1). During the period from 1 July 1959 to 1 July 1961, the number of workers occupied in the state agricultural sector increased by 2.7 million because of conversion. By 1960 the sovkhos share in the delivery of grain and milk to the government exceeded the level set by Khrushchev for 1965 in his theses on the Seven Year Plan.

USSR: Distribution of Sown Acreage by Sectors, 1958 and 1961

Figure 1

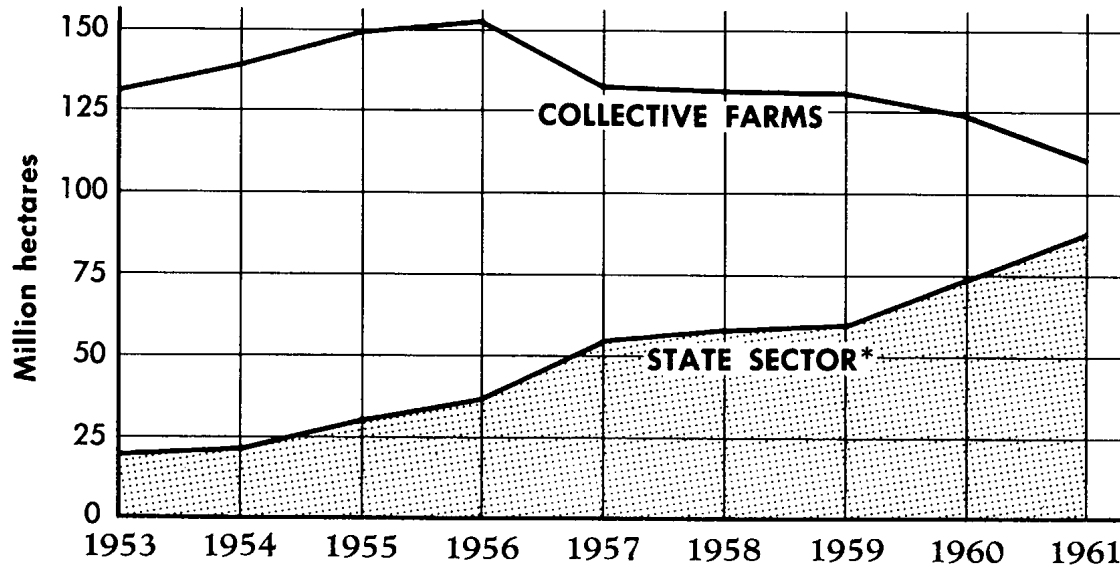


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Khrushchev has given an incomplete explanation for the growth of the sovkhos system. At the 22d Party Congress he explained that the system had grown because of the need to set up new sovkhos, both to reclaim the new lands and to supply the urban and industrial centers. Actually, during the peak years (1954-56) of the new lands program, sown acreage in the state sector grew less than kolkhoz sown acreage. Since 1956, however, the share of the state sector in the total sown acreage has grown from 18 percent to almost 43 percent, largely through conversion -- a conversion that has gone far beyond the scope of the new lands and the suburban farm programs (see Figure 2).*

* Following on p. 12.

Figure 2

USSR: Distribution of Sown Acreage by Sectors, 1953 Through 1961

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*Includes state farms (Sovkhozy) and other state agricultural enterprises

Thus, contrary to Khrushchev's past policy statements and contrary to his theses on the Seven Year Plan, kolkhozes have declined rapidly in relative importance. In view of past inconsistencies, there is little reason to give credence to Khrushchev's latest pronouncements on conversion. In fact, the latest plan for the delivery of agricultural products to the government in 1962 specifies an increased share for the sovkhozes, indicating that conversion is expected to continue. If conversions continue at the 1960-61 pace, in the next year or so the sovkhoz will replace the kolkhoz as the dominant institution in Soviet agriculture, a position that the kolkhoz has held for the past 30 years.

IV. Problems

During the first 3 years of the Seven Year Plan (1959-65), Soviet agriculture has continued as the chronically weak sector of the economy of the USSR. Whereas gross industrial output increased by 33 percent in 3 years instead of the 27 percent envisaged by the Seven Year Plan, agricultural output at the end of 1961 had progressed very little toward the goal for 1965 of a 70-percent increase in comparison with 1958. According to Khrushchev, in 1961 the officially reported

production of grain, meat, and milk was short of the goals for 1961 as envisaged by the Seven Year Plan by 16.4 million, 3.0 million, and 16.0 million tons, respectively.

The lack of significant progress in Soviet agriculture is in part due to the fact that 1958, the base year of the Seven Year Plan, was an excellent crop year, whereas the succeeding 3 years have been only average or below average. In part, the lack of progress has been caused by the chronic shortcomings of the agricultural sector -- inadequate material incentives to the farmers; inadequate investment, as reflected in a shortage of critical machinery, spare parts, and mineral fertilizers; and ineffective, overcentralized direction. Lack of progress can be attributed also to the position of agricultural science in the USSR. Too often, scientists engaged in agricultural research have not only lacked the requisite freedom for conducting research but also have been forced to tailor agricultural science to ideological and Party demands. The dilemma of the agricultural scientist is epitomized by P.A. Vlasyuk, President of the Ukrainian Academy of Agricultural Sciences, whose frank admission that the scientists carry out the assignments of the Party evoked a scathing denouncement by Khrushchev for "bootlicking and kowtowing." Not to have heeded Party assignments, however, would have meant risking loss of position, ostracism, and, in earlier times, even prison sentences.

The unsatisfactory situation in agriculture has been of special concern to Khrushchev because he has been intimately associated with the agricultural policies and programs adopted after the death of Stalin in 1953. As a result of measures implemented under Khrushchev, gross agricultural output in the 1954-58 period increased by 35 percent in comparison with the previous 5-year period, and in 1958, a year of exceptional weather, a record crop raised output to 50 percent more than in 1953.

Khrushchev's intense preoccupation with the badly lagging agricultural economy is evident from the attention given to it by the Soviet leader in 1961. Of 33 formal public speeches made by Khrushchev in 1961, 16 were devoted exclusively to agricultural problems. Following the discussions on agriculture at the Party Plenum in January and again after the 22d Party Congress in October, Khrushchev spent a total of 32 days on personal inspection tours of the main farming areas in the USSR. His visits to the primary grain-producing regions in both the spring and the autumn of the same year are unprecedented.

V. Proposed Solutions

In spite of the chronic underfulfillment of ambitious plans, in recent years Soviet leaders have consistently substituted exhortations,

personnel changes, and administrative reorganizations for adequate incentives and investments needed to stimulate agricultural production.

A. Reorganization of Agricultural Administration

Following the discussions on agriculture at the Party Plenum of January 1961, the Ministry of Agriculture, USSR -- already weakened by the loss of its planning and procurement responsibilities, the abolition of its MTS system in 1958, and the loss of its supply function in 1960 -- was divested of responsibility for the administration of sovkhozes, kol-khozes, and forestry and for the repair of agricultural machinery. These functions were scattered among several government organizations (Gosplan, USSR; the union-republic Councils of Ministers, a new Agricultural Machinery and Supply Association, USSR; and a new State Committee for Agricultural Procurement, USSR), leaving no organization clearly in charge of agriculture. The Ministry of Agriculture, USSR, was reduced to a research and extension service charged with the direction of agricultural research and educational establishments.

Not only did the reorganization in 1961 fail to stimulate agricultural production in 1961 (although it could not have been expected to assert itself to any great extent within such a short time), but it even may have contributed to the agricultural problems of the USSR by confusing agricultural administrators. There was evidence of resistance and apathy toward the reorganization at both the republic and the local levels.

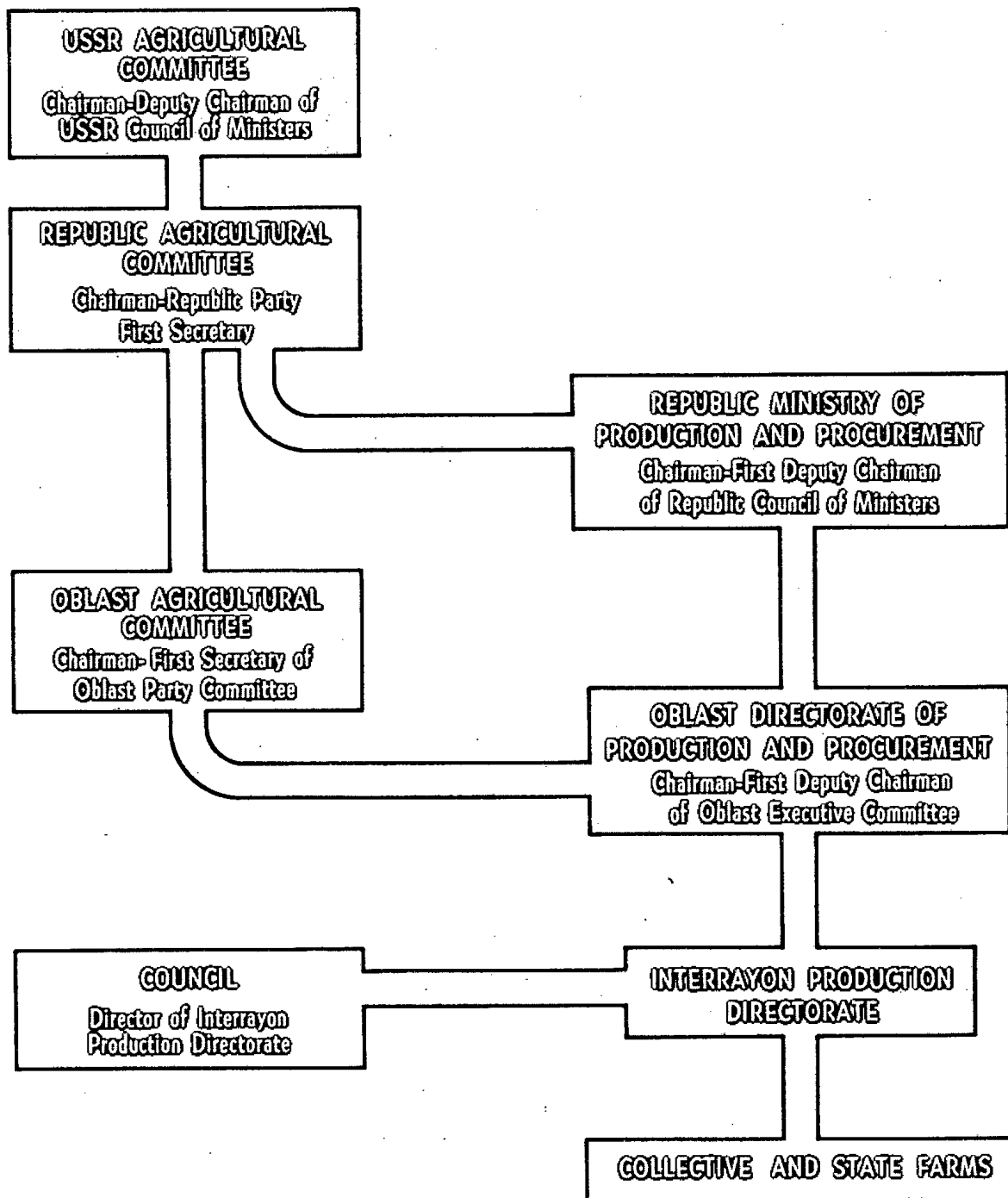
The fragmentation of the governmental administration of Soviet agriculture resulting from the reorganization in 1961 weakened the position of the governmental bureaucracy, or managerial class, and enhanced the position of the Party in the administration of agriculture. The Party Plenum of March 1962, which endorsed another reorganization of agriculture, formalized the dominant position of the Party in the administration of Soviet agriculture. Opposition to the proposed abolition of the grass-rotation system of farming may have been an important factor in the decision to provide a clearer delineation of administrative responsibility and an integral role for the Party in agricultural administration.

Under the reorganization in 1962, a national Agricultural Committee was established to supervise production and procurement of agricultural products in the republics and oblasts (see Figure 3).^{*} Headed by N.G. Ignatov, a Deputy Chairman of the Council of Ministers, USSR, this committee will include the chief of the Agricultural Department for Union-Republics of the Central Committee of the Communist

^{*} Following p. 14.

Figure 3

USSR: Organization of Agricultural Administration



Party of the USSR (CPSU); the Chairman of the State Committee for Agricultural Procurement, USSR; the Minister of Agriculture, USSR; the Chairman of the Sel'khoztekhnika (Agricultural Machinery and Supply Association), USSR; the Deputy Chairman for Agriculture of Gosplan, USSR; and the Deputy Chairman for Agriculture of the Gosekonomsovet.

The main function of this committee will be the "organization of operative control over the implementation of directives of the Party and government in agriculture." Included in its more important responsibilities will be (1) review of the plans for production and state purchases of agricultural products, the use of those products, and the creation of state reserves; (2) establishment of requirements for tractors, agricultural machines, fertilizers, and building materials and control of the fulfillment of these requirements by industry; (3) review of plans for capital investment and construction in agriculture; and (4) review of the problems of long-term development of agricultural production and procurement of agricultural products. In effect, the committee appears to be a top-level coordinating body. It is peculiar, however, that this committee will not be headed by a top-ranking Party member as is true of the republic and oblast committees.

Similar and apparently subordinate Agricultural Committees are to be constituted at the republic and oblast levels, headed by the republic and oblast Party first secretaries. Ministries and Directorates of Production and Procurement of Agricultural Products attached to these committees are to replace the organizations formerly entrusted with these responsibilities at the republic and oblast levels.

At the local level, interrayon Production Directorates for Collective-State Farms or State-Collective Farms (the specific designation depending on which type of farming unit is predominant in the area) are to be established to manage agricultural production and procurement. These directorates are to be established to administer several rayons, except where specific conditions indicate the need of a directorate in a single rayon. The directorates have been given broad authority in agricultural management at the local level.

A special decree of the CPSU Central Committee published in Partiynaya zhizn' (no. 8, 1962) established within these directorates the post of Partorg of the Obkom (Party Organizer of the Oblast Party Committee), a post subordinate to the Obkom. Thus the Partorg will answer directly to the oblast Party first secretary, who is both chief of the Obkom and chief of the oblast Committee for Agriculture. The special decree makes the Partorg the Party "watchdog" over the Production Directorate and its subordinate kolkhozes and sovkhozes, vesting the Partorg with wide-ranging responsibilities and power, perhaps

sufficient to dominate the directorate. Khrushchev has likened the post of Partorg to the former position of the Chief of the Politotdel (Political Section) of the MTS. Actually the influence of the Partorg will be broader than that of the Politotdel Chief -- the MTS served only the kolkhoz sector but both kolkhozes and sovkhozes will be subordinate to the new interrayon directorates.

The Komsomol (Young Communist League) also has representatives in the directorates. The role of the Komsorg (Komsomol-Organizers) and their instructors apparently is to be minor, relative to that of the Partorg. The main function of the Komsorg will be working with and getting the active support of Komsomol members on the farms for Party policies and programs.

A Council has been attached to the interrayon directorates to lend credence to the "democratic basis" of the new organization set up to administer the kolkhozes and sovkhozes. The director of the interrayon directorate will head the Council, which also will include the Partorg, the Komsorg, chairmen of kolkhozes, directors of sovkhozes, rayon Party first secretaries, rayon executive committee chairmen, and heads of departments of Sel'khoztekhnika. These advisory councils, which frequently will have a hundred or more members and will meet only four times a year, apparently will rubber-stamp the decisions of the directorates, in much the same manner that the "democratic" kolkhoz boards now approve the decisions of the kolkhoz chairmen.

The influence of rayon organizations in rural administration apparently has been usurped by the interrayon directorates. Much of the staffing of the directorates with administrative personnel and agricultural specialists probably was achieved by drawing personnel from the rayon executive committees. Furthermore, the staffs of the rayon Party committees have been substantially reduced in numbers. In the RSFSR, for example, 90 percent of the Partorgs and 40 percent of the directors of the directorates have been recruited from the ranks of the rayon Party first secretaries.

In summary, the reorganization of agriculture in March 1962 institutionalized Party dominance in the administration of agriculture. Now, for the first time, the republic and oblast Party bosses have become a formal part of the state administrative machinery for agriculture. These bosses are responsive to the ruling Party Presidium -- in fact, some of the republic Party bosses are members of the Presidium.

The reorganization, however, does not solve the basic problem of giving more flexibility to decision-making at the farm level, which is so necessary in agriculture. On the contrary, it appears that centralized decision-making has been strengthened. A decree published in

Pravda on 19 April 1962, aimed at upgrading the role of the specialists in agricultural production, may be an attempt to soft-sell publicly the role of the Party in agriculture. There is little doubt, however, that the Party, oriented toward national goals, will prevail, probably even to a greater extent than in the past, over the recommendations of the specialists.

B. Priority of Agriculture

During the "new course - new lands" period, roughly from 1954 through 1957, the Soviet consumer and agricultural sectors enjoyed a high position in the scale of national priorities. At the Party Plenum of January 1961, Khrushchev announced a new era of high priority for these sectors. The sincerity and urgency of Khrushchev's current program may be tested by comparing its characteristics with those of the "new course and new lands" programs, two programs that unquestionably were in earnest.

Khrushchev's remarks on the subject of priority at the January Plenum bore a striking resemblance to statements made by Malenkov when he launched the new course program for consumer goods in August 1953. A careful study of these two speeches reveals almost identical wording on the subject in all but one important respect: Malenkov's program was urgent and definite, whereas Khrushchev's was long term and vague. Malenkov's new course speech generated a series of implemental decrees that spelled out detailed short-run targets and specific priorities. The resolution of the Plenum of September 1953, for example, directed the construction materials ministries to give first priority to the MTS system in the shipment of materials. Although recently revised plans for rural electrification, irrigation, and allocation of equipment and fertilizer seem to reflect a long-range increase in the priority of Soviet agriculture, none of the "input" decrees and resolutions that have followed the Plenum of January 1961 has clearly pegged agriculture at a higher level in the scale of immediate priorities. For instance, in his opening speech at the Plenum of March 1962, Khrushchev suggested that it would be a good thing to regard the building of three new agricultural equipment plants as priority construction. The Plenum resolution, however, bypassed this suggestion, merely noting that "it is necessary to find additional capital" for agricultural equipment plants.

The usual quantitative indicators reflect no significant change in the status of agriculture during 1961. Agricultural investment ("productive") increased by only about 6 percent in 1961 compared with increases of 45 percent in 1954 and 38 percent in 1955, the beginning years of the priority new lands program (see Table 2*).

* Table 2 follows on p. 18.

Table 2

"Productive" Capital Investments in Soviet Agriculture a/
1951-61 and 1962 Plan

Year	Million New Rubles ^{b/}			Index	Agricultural Investment as a Percentage of Total Investment ^{e/}
	State	Kolkhoz ^{c/}	Total ^{d/}		
1951	1,025	836	1,861	100	15.8
1952	971	962	1,933	104	14.6
1953	881	1,029	1,910	103	13.7
1954	1,536	1,226	2,762	148	17.0
1955	1,992	1,812	3,804	204	20.5
1956	2,118	1,906	4,024	216	18.7
1957	2,343	1,860	4,203	226	17.6
1958	2,279	2,462	4,741	255	17.3
1959	2,021	3,050	5,071	272	16.4
1960	2,471	2,721	5,192	279	15.3
1961 ^{f/}	3,000	2,500	5,500	296	N.A.
1962 Plan	3,700 ^{g/}	N.A.	N.A.	N.A.	N.A.

a. Data exclude outlays for "establishment of herds" and for capital repair.

b. In prices of 1 July 1955 adjusted to the new 1961 rate of exchange.

c. The data exclude outlays for tractors and agricultural machinery that formerly belonged to the MTS system.

d. Although Soviet handbooks add the state and kolkhoz investment to arrive at total investment, the two series are not strictly compatible. State investment figures exclude outlays for forest planting, but kolkhoz investment figures include such outlays.

e. Total investment excludes private housing.

f. Estimated. Information is available for all (productive and nonproductive) investment for 1960 and 1961 for the state and kolkhoz sectors. The productive investment figures for 1961 were obtained by applying the ratio for 1960 (all investment to productive investment) to the data for 1961 for all investment.

g. Derived by increasing unrounded data for 1961 by 25 percent and rounding to 2 significant digits.

Allocations of trucks to agriculture, which by 1960 had fallen below the level of 1953, apparently remained below the level of 1954-58 (see Table 3*). The share of output of trucks allocated to agriculture, which averaged 33 percent for the period 1954-57, is estimated at 21 percent in 1961. Furthermore, only 69 percent of the total output of tractors was allocated to agriculture in 1961 in contrast to 74 percent for the period 1954-57, a situation that does not reflect a high priority during 1961.** The value of output of agricultural machinery (excluding tractors), which rose an impressive 28 percent in 1961, still fell short of the peak level of 1957.*** The plans for critical spare parts and fertilizer for 1959-61, in terms of new capacity, were fulfilled by only 64 percent and 44 percent, respectively.

The plan for 1962 suggests that state investment, scheduled to increase by 25 percent, will do little more than keep pace with the growth of the state sector in agriculture, which is being accomplished by the conversion of kolkhozes to sovkhoses. Lower input prices, lower taxes, lower interest on state credits, and other measures enacted during the period from January 1961 to February 1962 are expected to reduce kolkhoz expenses by about 1.35 billion rubles† annually. The sum thus released presumably would be available for such areas as investment and wages. In addition, the procurement price increase of 1 June 1962 for kolkhoz livestock and poultry is expected to provide more than 1 billion rubles of

* Table 3 follows on p. 20.

** In March 1962, Khrushchev noted that the agricultural equipment park on 1 January 1962 included 790,000 trucks and 1,168,000 tractors compared with requirements of 1,650,000 trucks and 2,696,000 tractors.

*** It is significant that, for the first time in recent years, information on the allocation of equipment to agriculture was missing from the Soviet 1961 plan fulfillment results. The above information on allocations in 1961 was indirectly derived from other sources.

† Unless otherwise indicated, ruble values in this report are given in new rubles established by the Soviet currency reform of 1 January 1961. A nominal rate of exchange based on the gold content of the respective currencies is 0.90 ruble to US \$1. This rate, however, should not be interpreted as an estimate of the equivalent dollar value of similar US goods or services.

Table 3

Allocation of Trucks, Tractors, and Agricultural Machinery
to Soviet Agriculture
1953-61 and 1962 Plan

Year	Trucks			Tractors			Value of Agricultural Machinery ^{b/} (Million New Rubles)
	Thousand Units			Thousand Units			
	Total Production ^{a/}	Allocated to Agriculture	Percent of Total	Total Production	Allocated to Agriculture	Percent of Total	
1953	277	69	25	111	76	68	N.A.
1954	309	116	38	135	99	73	N.A.
1955	337	111	33	163	123	75	540
1956	367	114	31	184	140	77	710
1957	382	125	33	204	148	73	1,000
1958	389	102	26	220	158	72	850
1959	370	76	21	214	144	68	689
1960	385	66	17	239	157	66	753
1961	406	86 ^{c/}	21 ^{c/}	264	181	69	964
1962 Plan	N.A.	100	N.A.	296	216	73	1,138

a. Including buses.

b. Production of agricultural machinery excluding trucks and tractors in prices of 1 July 1955 adjusted to the new 1961 rate of exchange. Data for 1956-58 are estimates based on production in physical units.

c. Estimates on information for a 6-month period.

additional kolkhoz income in 1962.* Thus the total sum of 2.35 billion rubles accruing to the kolkhozes as a result of the financial concessions and the increase in procurement prices in 1962 would equal 17 percent of the total kolkhoz income of 13.6 billion rubles in 1961. Consequently, capital available for investment is estimated to be 15 to 20 percent above the level in 1961. The actual level of kolkhoz investment in 1962, however, will depend to a large extent on weather, the amount of conversion, and the availability of equipment, fertilizer, and other capital inputs.

Production of agricultural equipment thus far in 1962 shows an increase in comparison with 1961, but the allocation of equipment apparently will fall short of that required to meet the expanded workload in 1962.

Production of fertilizer during 1959-61 increased at a rate far short of that needed to meet the goal of the Seven Year Plan (see Table 4**). The planned increase in output of fertilizer for 1962, the midyear of the Seven Year Plan, is below the average annual increase implied by the original Seven Year Plan directives. Production figures for the first 6 months of 1962 suggest that even this modest plan will not be met. Annual plans for production of fertilizer for the years 1959-62 were very modest in relation to the target for 1965, a situation which suggests that the leadership considered this target a hollow goal. In recent months, however, there have been signs that the regime is becoming more earnest about the 1965 goal. For example, the chemical industry has introduced an incentive system for workers engaged in production of fertilizers and has drawn up plans for the allocation of a larger share of its investment funds for the construction of fertilizer plants. Although these measures may raise output of fertilizer in the long run, they probably are not sufficient to overcome the significant lag during the Seven Year Plan period.

* This sum does not include additional kolkhoz income from a rise in prices for livestock products on the kolkhoz market. Although such a rise is likely, there is no good basis for estimating its magnitude.

The procurement prices for kolkhoz butter and cream also were raised on 1 June 1962. Sales of butter and cream to the state do not account for a significant share of kolkhoz income, and the price increase for these products was modest. Therefore, the change in the procurement price for butter and cream should have little impact on kolkhoz income.

The prices paid to sovkhoses for livestock deliveries according to the decree of 1 June 1962 are to be 10 percent below the prices paid to kolkhozes.

** Table 4 follows on p. 22.

Table 4

Production of Mineral Fertilizer in the USSR
1958-61 and 1962 and 1965 Plans

<u>Year</u>	<u>Production</u>	<u>Actual Increase Above Previous Year</u>
1958	12.4	0.6
1959	12.9	0.5
1960	13.9	1.0
1961	15.3	1.4
1962 Plan	17.2	1.9
		<u>Average Increase During 1959-65</u>
1965 Plan	35.0 <u>b/</u>	3.2

a. Gross weight.

b. Original Seven Year Plan. Recent information suggests that the plan has been raised to 37.7 million tons.

Clearly, Khrushchev's current program for consumers and agriculture lacks the initial vitality of the "new course and new lands" projects. At the Plenum of January 1961, Khrushchev spoke of this program as "compensation for lost opportunities." In his closing remarks on the requirements of agriculture delivered at the Plenum of March 1962, he hinted that more opportunities will be lost:

It can be stated beforehand that in a few years we shall perhaps reproach ourselves for not having fully taken into account our possibilities for the development of agriculture.

The Plenum failed to give agriculture the priority that Khrushchev had asked for in his opening speech. Although it is questionable whether or not Khrushchev will continue to fight for this priority, the above quotation can be interpreted as both an admission of defeat and a disclaimer of responsibility for future consequences.

In summary, when Khrushchev initiated his program for consumers and agriculture in January 1961, he evidently believed that industrial overfulfillment would continue to generate substantial funds throughout the remaining years (1961-65) of the Seven Year Plan and that a large

share of these funds could be invested in the consumer and agricultural sectors. During 1961, and perhaps earlier, it became increasingly clear that there were other demands on these funds from increased space, defense, and industrial construction costs. Although Khrushchev continued to press for his program for consumers and agriculture in his opening speech to the Plenum of March 1962, his closing speech cautioned agricultural leaders and workers not to expect the immediate transfer of funds to agriculture to the detriment of industry and defense. The apologetic appeal of 1 June 1962 to the population spelled this position out more clearly. The financing of the price increase for the procurement of livestock would fall not on defense and not on heavy industry but on the consumer. This latest measure represents a setback to Khrushchev, who had promised in January 1961 that industrial funds would be transferred to the consumer and agricultural sectors and who, as early as 1958 and as recently as March 1962, had further promised the consumer that retail prices for agricultural products would not be raised.

C. Changes in the Cropping System

Khrushchev, deeply concerned about the lack of significant progress in agricultural production during the first 3 years of the Seven Year Plan but apparently unable or unwilling to obtain a high priority for investments in agriculture, has again turned to "hidden reserves." The main "hidden reserve" that he has discovered recently is the land in perennial grass, oats, and clean fallow. At the 22d Party Congress in October 1961, Khrushchev initiated a program that eventually would eliminate the grass-rotation system of farming and restrict the practice of clean fallowing. Following the Party Congress, Khrushchev toured the agricultural areas of the USSR promoting his program, and at the Party Plenum of March 1962 he firmly admonished those opposing it. Cultivated crops -- corn, sugar beets, peas, and field beans -- will be sown on the acreages released.

The grass-rotation, or ley, system, which was developed by the noted Soviet agronomist, V.R. Vil'yams, calls for successive periods of sown grass and cultivated crops, with a minimum of 2 to 3 consecutive years of perennial grasses and clover to be included in crop rotations averaging 7 to 9 years in length. Clean fallowing is a practice whereby the land is not planted for a growing season and is cultivated only as needed to prevent growth of the weeds. The practice controls weeds and permits the accumulation of moisture in the soil, bringing about higher and more stable crop yields.

Grasses currently occupy an important place in Soviet agriculture, but they are not so prevalent in the crop rotations as the current controversy over the grass-rotation system would imply. Under Stalin this system was indiscriminately introduced in all the agricultural areas of the USSR. Following Stalin's death, however, the

system was discarded in those areas where it was clearly not suited, chiefly the semiarid zones. About 17 to 18 percent of Soviet sown acreage was in perennial and annual grasses and clover in 1959, but in the more humid Northwest these grasses and clover averaged one-third of the sown area.

Grasses and clover serve a beneficial purpose in crop rotation in most areas, helping to maintain the fertility and structure of the soil while providing a cheap source of feed for livestock. Also, labor and machinery requirements generally are much less than required for cultivated crops. In the USSR, where a lack of fertilizers has long handicapped agriculture, grasses and clover have contributed significantly toward soil fertility.

Clean fallowing, although not extensively practiced in the USSR in recent years, has been acclaimed by many Soviet scientists as a partial answer to the low yields caused by weed infestation and frequent drought in the arid new lands region. In the Canadian spring wheat belt -- an area with physical and climatic characteristics similar to those of the new lands -- clean fallowing has a recognized place in increasing and stabilizing crop yields. Canadian experience indicates that the USSR has been sowing a dangerously large proportion of cropland to grain in the new lands. In contrast to 30 to 40 percent of the cropland in clean fallow in the Canadian wheat belt, only about 10 percent of the cultivated land in the new lands area was fallowed in 1959. Failure to institute proper crop rotations in the new lands has already been reflected in decreasing yields. Pressure on local officials to produce the maximum amount of grain has produced a vicious circle -- the area of fallow has not been increased, because yields have been low as a result of weed infestation and depletion of soil moisture and fertility, due in part to the inadequate area in fallow.

Long a critic of some aspects of the grass-rotation system -- at least dating back to September 1953 -- Khrushchev was able to bring about a significant increase in agricultural output between 1954 and 1958 through increased investments, incentives, and some changes in the cropping system, as was true of the corn program. In those days, however, he attacked the grass-rotation system only as being unsuited for the more arid regions. Even as late as the discussions on agriculture at the Plenum of January 1961, there was little indication that the grass-rotation system would be condemned. A strong hint that the matter was being considered was given in Khrushchev's speech in Alma-Ata in March 1961, when he said:

The September (1953) Plenum of the CPSU Central Committee condemned the stereotyped approach as reflected in the use of the grass-rotation system of farming as the only one for all areas of the country. We are now opposing a stereotyped approach Obviously, certain people have willingly accepted the order to reject a stereotyped approach in the agricultural system, but they have not yet recognized the profound thought behind the decision of the Party and the government criticizing the stereotyped use of the grass-rotation system of agriculture.

Khrushchev may have postponed the attack on the grass-rotation system beyond the spring of 1961 because of the disruptions in spring sowing that would have occurred and because the necessary seed and equipment were not available to carry out any extensive plowing and seeding of grassland at that time. Strong attacks on the grass-rotation system were not in evidence during the crop season of 1961, even when it became evident that the 1961 crop would not come up to earlier optimistic forecasts. At a general meeting of academicians and corresponding members of the Lenin All-Union Academy of Agricultural Sciences early in August 1961, M.A. Ol'shanskiy, the Minister of Agriculture at the time, whose chief responsibility was supervision of agricultural science and research, avoided the issue of grassland altogether. It is possible, of course, that the meeting may have been used as a sounding board to determine the opposition to the radical changes to be proposed by Khrushchev at the 22d Party Congress in October.

Following the Party Congress in October 1961, Khrushchev's second tour of the major agricultural areas in 1961 and his attendance at regional agricultural conferences appear to have been directly aimed at propagandizing the abolition of the grass-rotation system of farming and of overcoming the apparently significant opposition that his proposal had aroused among scientists and specialists. The press campaign waged against the grass-rotation system took on the proportions of a major offensive, which is indicative of the degree of opposition. At the Party Plenum of March 1962, Khrushchev stated in respect to agriculture:

The harmful effect of the ley farming system is evident. But it cannot be said that the ley farming advocates are abandoning their positions. They are trying to uphold them stubbornly. In a letter from a group of scientists of the Lithuanian Agricultural Research Institute, they assert that grass must be the foundation of the fodder base of stockbreeding Similar reports come from other areas.

Khrushchev's position was upheld in a resolution of the Plenum condemning the grass-rotation system. To insure compliance with the resolution, the newly created Production Directorates have been given the responsibility "for working out and introducing rational systems of crop husbandry and an effective crop structure of the areas under cultivation."

The decision to restructure the cropping system is aimed at rapidly improving production of meat and milk by increasing the feed supply. At the March Plenum, Khrushchev frankly admitted that "we simply do not have enough meat," adding, "If we remain with the present disposition of sown crops, with the present types of feed crops, and with the present yield, we shall have no feed. There will be no meat or milk either today or tomorrow."

In 1961, 64 million hectares (equal to 30 percent of the cultivated area) were in sown grass, oats, and clean fallow. Eventually, 41 million hectares* of this area will be shifted to cultivated crops -- corn, peas, field beans, and sugar beets. Eleven million hectares are to be retained in sown grasses (alfalfa and clover), and the remaining 12 million hectares presumably will be in clean fallow and oats. In 1962, about 16 million hectares were shifted to cultivated crops, and the area in wheat, barley, and millet was expanded by 10 million hectares, leaving about 38 million hectares in sown grass, oats, and clean fallow. The total sown area increased 11 million hectares, or about 5 percent in comparison with 1961.

Apparently voicing the sentiments of a widespread opposition to abandonment of the grass-rotation system, a Soviet agronomist in a letter to Sel'skaya zhizn', the Soviet agricultural newspaper, pointed out that at the present state of technology the grass-rotation system had been serving a useful purpose in Soviet agriculture. Because of the shortage of mineral fertilizers, cultivating machinery, harvesting machinery, trucks, and tractors, perennial grasses and clover proved to be the most economical crop for providing feed while at the same time returning nitrogen to the soil. Grass rotation makes possible a more efficient use of labor and equipment because the harvest of hay does not coincide with that of other crops.

* During 1954-56 the new lands program increased the total sown area in the USSR by almost 38 million hectares. The program to shift 41 million hectares from grasses and fallow to cultivated crops will not result in a massive increase in sown area similar to that of the new lands program, for grasses are already included in the sown area figures. The manpower and equipment requirements of the shift in cropping pattern, however, will be roughly similar to those of the new lands program.

In the short run the abandonment of the grass-rotation system and the reduction of fallow could result in a sizable increase in production of the feed crops necessary to increase production of livestock. The decision to increase the area in cultivated crops in the face of shortages of fertilizer and machinery, however, involves considerable risk. Reducing the area of clean fallow in the new lands area would compound the risks to agriculture in that area, where crop production is already a hazardous venture. In the long run the program is likely to be self-defeating as soil moisture and nutrients are exhausted.

The change has dealt a "low blow" to Soviet agricultural science. Refutation by fiat of a system of agriculture which in some degree has general acceptance throughout the world and which has been the official basis of Soviet agriculture since the late 1930's could well have a demoralizing effect on Soviet scientists on a scale comparable to that following the repudiation of classical genetics and adherence to Lysenkoism.

D. Material Incentives

I should like to stress once again the exceptional importance of the Leninist principle of material incentives for the cause of Communist construction It is completely erroneous to oppose material stimuli to moral ones, material incentives to ideological-education work The development of moral stimuli and the strengthening of material stimuli are indissolubly linked, mutually support each other, and are directed towards the same goal.

These noble statements by Khrushchev at the Plenum of March 1962 apparently reflect his genuine concern for improving the material incentives of the Soviet farmer. The material stimuli necessary to overcome the inertia in the agricultural economy, however, have been prominently lacking in recent years. The measures taken to improve the agricultural situation following the death of Stalin included concrete proposals to stimulate the material interest of the Soviet farmer. Procurement prices, which had been intolerably low for most agricultural products, were raised; tax concessions were made; monthly wage advances were encouraged; and obligatory deliveries from private plots were decreased and then abolished.

A decree published in March 1956 recommended that kolkhozes make monthly cash "advances" to the collective farm members (kolkhozniki)

in partial payment* for the work done by them on the socialized sector of the kolkhoz during the month. Also, a sustained effort was made following the Party Plenum of December 1958 to get the kolkhozes to abandon the workday (trudoden) system of labor payment, which included payment in kind, and to go over to a "guaranteed" monthly cash wage system. The implementation of these two measures and consequently their success in increasing the interest of the kolkhozniki in working on the kolkhozes were limited, probably because of the relatively poor financial status of most farms.

Although the reform of the procurement price system in 1958 contained provisions to maintain kolkhoz income in the face of adverse conditions, there is little evidence to indicate that the new price system took into consideration the full financial effects of the MTS reform on the kolkhozes. Following the mediocre crop years of 1959 and 1960, the heavy financial burden that was imposed on the kolkhozes by the purchase of MTS machinery had become obvious. The increase in the money income of the kolkhozes (as calculated in terms of current rubles per household) averaged only 8 percent above 1958 for those 2 years.

In 1961 the regime took some measures to improve the poor financial condition of the kolkhozes. The period over which they could pay for the machinery purchased from the MTS's was extended; prices of trucks, tractors, gasoline, and spare parts were lowered; the tax on annual income from animal husbandry was reduced by 80 percent through 1965; and interest on long-term state credits was lowered. It was estimated that these measures would save the kolkhozes about 900 million rubles annually, a part of which would be used to purchase consumer goods (presumably by increasing the income of the kolkhozniki.)

Beginning in 1962, the state is to assume the transportation costs for the delivering of products by the kolkhozes to procurement points up to 25 kilometers (the state was already paying those costs incurred beyond 25 kilometers). This measure reportedly will enable the kolkhozes to save almost 200 million rubles annually. In February 1962 a price decrease, calculated to save the kolkhozes 250 million additional rubles each year, was decreed for building materials, metal, and metal products. Thus measures enacted in 1961 and early in 1962, excluding the price increase of 1 June, will save the kolkhozes about 1.35 billion rubles annually, which is equal to about 11 percent of the money income of the kolkhozes in 1961.

Certainly the most important measure taken since 1958 to stimulate the agricultural sector, especially animal husbandry, is the recent

* The final settlement or accounting by the kolkhoz with its members was still made at the end of the year.

decree that has raised the procurement prices for livestock and poultry from kolkhozes and kolkhozniki by an average of 35 percent and for butter and cream by 10 and 5 percent, respectively. Preliminary estimates indicate that the new prices will increase the money income of the kolkhozes by about 1 billion rubles. This increase will be a direct addition to kolkhoz income. Combined with the "savings" to be realized by kolkhozes from the measures taken in 1961 and early in 1962, kolkhoz income should improve by about 15 to 20 percent above that for 1961. Although only a part of these funds will be paid out as wages, some improvement -- probably 15 to 20 percent -- in the average wage received by kolkhozniki should be realized. In the long run the increased sums available for capital investment in the livestock sector resulting from the increases in procurement prices should raise labor productivity, which, presumably, will be rewarded with some increases in remuneration to labor.

Because the new procurement prices for livestock and livestock products will only bring the prices the kolkhozniki receive in line with their costs of production, there seems little doubt that the usual exhortations to increase labor productivity and improve the quality of products will continue to play a significant role in attempting to stimulate the material interest of the kolkhozniki. In 1961, added emphasis was given to rewarding workers with part of the above-plan production. Khrushchev recently held up as a model worker a Moldavian corn grower who received 9 tons of corn as his of the above-plan production. Although the exceptional earnings of some kolkhozniki are widely propagandized, few kolkhozniki can expect similar rewards, principally because the conditions for high labor productivity do not exist on the majority of kolkhozes.

A new wage system intended to increase the interest of workers on sovkhozes in the results of their work was adopted in 1961. Instead of a fixed wage for sovkhoz workers, the new system provides that for a requisite quantity of work the sovkhoz workers will receive a certain part of their wage, with the remainder being dependent on the quantity and the quality of production. The proportion of the wage that is dependent on production is considerably higher for the workers engaged in animal husbandry than for those engaged in production of crops. In animal husbandry, as much as 80 percent of the wage can be dependent on production, whereas in production of crops the proportion may be as little as 20 percent.

Presumably the new wage system will mean an over-all increase in the wages and thus the incentives of the sovkhoz workers, for 260 million additional rubles were allocated in 1961 for the readjustment in wages. The USSR, however, has not publicized the effectiveness of this new wage system, suggesting that at least to date the new system has not

produced the desired results. Any lack of success may be attributable to the fact that with this new wage system the state for the first time has shifted some of the hazards of crop failure from itself to the sovkhos workers. The introduction of the new wage system was to start in the new lands area, and production of crops in that area was adversely affected by drought in 1961.

VI. Prospects for 1962

A preliminary appraisal of Soviet agricultural prospects for 1962 presents a rather spotty and inconclusive picture. There is little evidence to indicate that the priority of agriculture has been raised enough to affect output significantly this year. The changes in agricultural organization approved at the Party Plenum of March 1962 and instituted in recent months are not likely to have an important effect on agricultural production in 1962. Implementation of Khrushchev's recommended changes in cropping practices, however, may result in some increase in agricultural production, but because some production was already being obtained from the area in grass and oats and because the increased volume of work in 1962 is likely to cause some delays in harvesting, the net increment to production attributable to the increase in the sown area and to the changes in the cropping patterns in 1962 probably will be no more than 5 percent under average weather conditions.

Weather during the spring of 1962 was generally favorable for fieldwork. The most notable exception was the western part of the European USSR, where weather retarded spring fieldwork. Good progress was realized in other regions, however, with the result that spring planting was completed without unusual delay even though the area planted this spring was enlarged.

Weather conditions through July have not been particularly favorable for production of crops in 1962. Much of the European USSR has been plagued by damp, cold weather, which has retarded the development of crops. At the same time, parts of the Ukraine and the North Caucasus have been experiencing a shortage of moisture. Although the early spring drought in the new lands was broken somewhat, many areas have been deficient in moisture throughout much of the growing season. Khrushchev in his speech on 27 June before a conference of workers from the Production Directorates of the Central Regions of the RSFSR was less than optimistic. He stated that the condition of the grain crop was satisfactory and that, barring especially unfavorable weather during ripening and harvesting, one could assume that the harvest would be larger than last year. He admitted, however, that there had been no rain in parts of the Ukraine during the fall of 1961 and that part of the winter grain area had to be reseeded because of winterkill.

Current prospects for the Soviet livestock industry in 1962 appear to be rather good. The number of livestock as of 1 January 1962 was claimed to be considerably larger than a year earlier. If true, this increase in number alone suggests an increase in output of livestock products. Also, spring in 1962 favored the early growth of pastures. The impetus to livestock raising provided by the large increases in state purchase prices decreed on 1 June 1962 should be reflected in some improvement in the performance of the Soviet livestock industry toward the end of the year. Weather during the remainder of the growing season is vital, however, in determining the amount of livestock feed that will be produced in 1962.