DRAFT: NOT FOR CITATION WITHOUT PERMISSION OF THE AUTHOR

з

NUMBER 126

.

,

-

CHANGES IN THE SOVIET MODEL OF RURAL TRANSFORMATION

Alfred Evans, Jr.

Conference on

STUDIES ON THE SOVIET RURAL ECONOMY

Sponsored by

Kennan Institute for Advanced Russian Studies The Wilson Center

April 13-14, 1981

CHANGES IN THE SOVIET MODEL OF RURAL TRANSFORMATION

Prepared for delivery in the conference, "Studies on the Soviet Rural Economy," at the Kennan Institute, Washington, D. C., April 12-14, 1981.

Alfred Evans, Jr. Department of Political Science California State University, Fresno During the Brezhnev period, the Soviet model of rural transformation has undergone a number of interrelated changes associated with the transition to a mature economy in the USSR. Powerful elements of continuity with previous rural economic and social policies persist. Soviet leaders are trying to make the framework inherited from the Stalin years work better. Yet in their attempts to achieve that objective, they have accepted significant modifications in the design and interrelationship of factors of rural change.

There seem to be four conditions behind the revision of the Soviet model of rural social and economic change. Those conditions are shared by mature industrial economies in general.¹ Each condition was established in the Soviet Union by the end of World War II or during the ensuing decade and a half. The most basic condition was the realization of a substantial level of industrial development by the early nineteen fifties. That attainment provided the means to support a higher level of investment in agriculture. It also was the result of a pattern of notoriously uneven development. By September 1953 Khrushchev voiced the conviction that the widening disparity between industry and agriculture was detrimental to further economic growth. A second condition apparent at the same time was growth in the wages of Soviet urban That trend, the result of the continued expansion of industry, had begun workers. at least by the late forties, and has proceeded since that time. The backwardness of agriculture inhibits raises in the real level of living of urban workers. A third condition, also present by the late forties, was the exhaustion of most of the supply of underemployed labor in the Soviet countryside. That supply must have seemed inexhaustible at the time of collectivization of agriculture. Even after the movement of twenty-four million people from the countryside to the cities during the nineteen

Ι

thirties, a substantial pool of underemployed laborers was left in the villages.² That surplus was largely wiped out by the war with Germany. From 1945 on, further growth in the Soviet urban population would be made possible only by sacrificing some agricultural output, or by investing in increases in the productivity of agricultural labor. A fourth condition, the exhaustion of the supply of unused, arable land, was felt somewhat later. Under Khrushchev's leadership, the land under cultivation in the Soviet Union increased about one fourth. However, by the early nineteen sixties, the prospect of gaining further increases in agricultural production by adding to the extent of cultivated land had vanished. Continued industrial development, a growing urban work force, rising urban incomes, and the lack of opportunity to introduce more land or labor into agriculture created pressure for the <u>intensification</u> of agricultural development, or getting more output from each worker and each hectare of land. Khrushchev recognized the need for the intensification of agriculture in some of his last, and most realistic speeches. A broadly ramified program of investment in the intensification of agriculture has been put into effect in the Brezhnev period.

The intensification of agriculture has been the main theme of changes in the Soviet model of rural transformation since 1965. Those changes parallel the experience of other countries with mature industrial economies.³ The first change in agriculture associated with the achievement of a mature industrial economy is an increase in the capital-intensiveness of agricultural production.⁴ Capital assets per worker increase. While the number of workers in agriculture decreases, output per worker rises. Among all forms of agricultural capital, farm machinery and motorized vehicles tend to show the highest rate of growth. Mechanization of agricultural labor is associated with increasing investment in land improvement and agricultural chemicals.⁵

The movement to capital-intensive, mechanized agricultural production is connected with changes in the structure of the agribusiness sector.⁶ The dependence of agricultural producers on other components of the agribusiness complex grows. Agricultural producers depend on larger amounts of off-farm inputs. Employment in the production of supplies for agriculture, and the processing and marketing of agricultural products, grows, though employment in agriculture itself declines. With growing concentration in industry, there is greater awareness of interdependence within the agribusiness sector, and greater need for administrative coordination within that sector. One of the major structural trends in American agribusiness has been the spread of various forms of vertical integration. Greater interdependence and demands for higher level integration are also the result of growing specialization in agriculture. It becomes more common for a commercial farm to concentrate primarily on growing one crop or raising one type of livestock. Increases in specialization and interdependence mean continued increases in the commercialization of "production; the proportion of each farm's production consumed or used on that farm falls, while the proportion of output that is marketed rises.

The growing integration of agriculture into an interdependent economy contributes to greater social articulation between urban and rural society.⁷ Mechanization is usually associated with increases in the number of educated professionals in agriculture. People in specialized occupational roles within the village community accept outside networks as their reference groups. Commercialization and vertical integration bring more frequent contact between farm and nonfarm management. As economic specialization and social differentiation increase within the rural community, more services from outside the community are required. Institutional linkages with the outside world are integrated with local networks of communication. Increased social articulation also is encouraged by other intrusions of the mass society such as education and mass communications. With increases in commuting and in the location of industry in rural areas, the rural nonfarm population grows. Nonfarm rural residents tend to have social characteristics and attitudes intermediate between those of urban dwellers and rural farm workers. The rural community, formerly isolated, is penetrated by the agents and culture of urban society.⁸

A mature industrial society experiencing the transition to agricultural intensification also seems to be characterized by the narrowing of urban-rural inequality.⁹ Increases in material reward for agricultural workers are furnished in order to bring about growth in the productivity of agricultural labor. It becomes difficult to retain skilled workers and professionals in rural settings without changes in social conditions to more closely approximate urban standards. Urbanrural inequality in incomes and levels of consumption decreases. Increasing investment in education in rural areas is related to the demand for a skilled agricultural work force, the need for a skilled industrial work force (recruited partly from migrants from the countryside), and the insistence of professionals in rural locales on improved educational opportunities for their children. The difference between urban and rural residents in educational attainment narrows. Rural transformation is not limited to agricultural development, but involves a complex pattern of social change as well.

II

In recent years, the Soviet model of rural transformation has assimilated each of the trends of change described above as typical of rural economic and social

life in a society that has attained economic maturity. By a <u>model</u> of rural transformation is meant a construct that forms a meaningful whole in the outlook of Soviet leaders. Inferences about that model may be drawn from the statements of the leaders, from the writings of ideologists and social scientists close to the regime, and from concrete policy commitments. However, we must be careful to keep in mind the distinction between hopes and reality. Objectives may not always be translated into consistent commitments of resources, and even the desired resource allocations may not always produce the intended results. Inconsistent execution of policy orientations and disappointing returns to policy outputs have plagued Soviet policies affecting rural society in the Brezhnev period.

The most widely acknowledged change in the Soviet model of rural transformation has been the decision to enhance the technology of agricultural production. Change in that area has been documented so well that only a very brief review of it is necessary.¹⁰ The beginnings of increased investment in agriculture can be traced to the first years of Khrushchev's leadership. The period since Brezhnev's address to the March 1965 Plenum of the Central Committee of the CPSU has seen dramatic growth in the proportion of investments devoted to agriculture. What the Soviets refer to as the "redistribution of resources in favor of agriculture" has brought increases in agricultural mechanization. In the nineteen seventies, emphasis on land improvement and the application of agricultural chemicals was heightened sharply. Capital investments in the Soviet agricultural complex during 1976-1980 were scheduled to be more than three times greater than in 1961-1965.¹¹ In 1978, Brezhnev exacted a commitment from the Central Committee to devote at least as high a proportion of total investment to agriculture in the Eleventh Five-year Plan (1981-1985) as in the preceding plan.¹² The growth in the capital-intensiveness of Soviet agriculture may be

expected to continue. However, some Soviet economists call for increases even beyond the planned investment in agriculture. In the mid-seventies two economists advocated a fivefold increase in the capital funding and energy provision of labor in agriculture.¹³

With the program of the "industrialization" of agriculture have come demands for the restructuring of organizational ties within agriculture, and between agriculture and other branches. Soviet economists have begun to think in terms of their equivalent of the agribusiness sector--the agro-industrial complex (APK). As the concept of the APK has been popularized, greater recognition has been devoted to the interdependence of agriculture and related branches.¹⁴ It is acknowledged that Soviet collective farms and state farms draw a growing proportion of supplies from outside agriculture, and ship a larger proportion of their produce to industry for processing. The point has been made that with further modernization of agriculture, the share of industrial branches in the agro-industrial complex will grow. Criticisms are directed at the current weaknesses of integration within the APK. Some scholars suggest unified organizational mechanisms for improving coordination and overcoming excessive departmentalism within the national agro-industrial complex.¹⁵ The vastness of the national APK would make coordination possible only at a very high level.

Restructuring of linkages between individual productive units within the agro-industrial complex also has been placed on the agenda. Specialization and concentration by agricultural enterprises are strongly endorsed by the consensus of Soviet economists and by the highest leadership.¹⁶ It is said that the production of several different types of crops and animal products by each farm detracts from the efficient use of new technology. With greater specialization, quotas for any one product are to be assigned to a smaller number of collective farms and state farms. Though complaints of lagging in implementation of the goal have been heard, there is evidence of a trend toward greater specialization in Soviet agriculture since 1965.¹⁷ Interfarm

cooperation is described as a means of furthering specialization through the creation of associations to relieve existing farms of tasks which now disperse their efforts. The movement toward interfarm associations received Brezhnev's support in 1973, and was approved by a Central Committee resolution in 1976.¹⁸ The number of workers in interfarm associations has increased substantially in recent years.¹⁹ The pace of implementation of interfarm cooperation has proved disappointing to the leadership so far. However, it should be remembered that the leadership views itself as pressing steadily for gradual, long-term change.

The Central Committee's 1976 resolution also offered official encouragement to vertical, agro-industrial integration. The forms of agro-industrial enterprises and associations vary, with the most common the sovkhoz factory (<u>sovkhoz-zavod</u>). The objective in each case is to place several stages in production and processing under the same management. The spread of those organizational forms has been slow. However, the Western scholar who has done the most research on the subject concludes "there can be little doubt that the regime regards vertically integrated agro-industrial combinations as the ultimate model for Soviet agriculture."²⁰

Agricultural development in the current Soviet perspective is part of a broadly based program of rural transformation. One of the distinctive features of contemporary Soviet thought is the realization that change in rural areas cannot be achieved only as the consequence of modernization of agricultural production. Khrushchev shared with Stalin the faith that agricultural mechanization would generate changes in social structure. However, Soviet sources now acknowledge that investment in agricultural mechanization is ineffective without concomitant social advances in rural areas.²¹ The model of rural transformation of the Brezhnev period stresses the interdependence of a wide range of economic and social factors.²²

Increasing social articulation between urban and rural society is to be fostered in the current model of change. Contemporary Soviet theorists refrain from making a sharp distinction between "urban" and "rural" society, while describing the differences of degree between different types of population settlement.²³ The current tendency is to look upon the urban and rural sectors not as polar opposites, but as interrelated parts of a single society. Within the rural sector, the growth of social differentiation is said to lead to greater integration with the rest of society.²⁴ The argument is that increasing occupational specialization in agriculture leads to the proliferation of social groups among the rural, farm population. Those groups are increasingly differentiated with respect to skills and education. The implication is that rural residents are becoming more differentiated in attitudes also, so that many are losing the traditional peasant consciousness. Rural professionals most closely resemble urban residents in education, reading habits, ownership of durable consumer goods, and lack of religious beliefs.²⁵ Rural specialists are seen as a link between the urban and rural population.

The penetration of urban influences into rural communities through education and mass communications is a traditional objective of the Soviet regime. Contemporary Soviet writers advocate the acceleration of that process.²⁶ The drive to make ten years of education available throughout the USSR in the nineteen seventies clearly was aimed at universalization of secondary education in the countryside. The construction of schools in rural areas has expanded rapidly in recent years.²⁷ The number of rural libraries, clubs, and movie theaters has risen.²⁸ The trend toward widespread ownership of television sets in rural areas since the early seventies means greater exposure to mass communications from urban centers.

A variety of means are thought to further social integration between town and country. One of the benefits of agro-industrial integration is said to be closer

social linkage between agricultural and nonagricultural workers. The employees of agro-industrial associations and enterprises are categorized as an intermediate group with a synthesis of social traits.²⁹ (However, research on the social consequences of vertical integration in the agro-industrial complex in the USSR is still in a preliminary stage.) Some authors favor the development of industrial subdivisions of collective and state farms as a means of providing work for farmers in the seasons of slackened agricultural activity.³⁰ The location of more industry in rural areas is now seen as essential for the development of population centers serving the rural population. The former view that "the Soviet countryside was to be as exclusively as possible an agricultural production area" has been abandoned.³¹ The growth of the nonagricultural rural population is considered a positive tendency.³² Nonfarm rural people now constitute two fifths of all rural residents in the Soviet Union.³³ The increase in commuting (maiatnikovaia migratsiia) from the villages to the cities is described as a natural tendency of "urbanization" of the rural way of life.³⁴ Nonfarm rural dwellers and commuters from rural areas are depicted as agents of social articulation between urban and rural society. A gesture of encouragement for urbanrural social integration was offered with the regime's announcement in the mid-seventies of the decision to issue internal passports to collective farm members.³⁵

The reduction of inequality between the urban and rural population in the distribution of material benefits is another objective of the current version of the Soviet model of rural transformation. In his speech to the Twenty-Fifth Party Congress, Brezhnev referred to the "equalization of the material and cultural conditions of life of the city and countryside" as a programmatic goal of the Party along with the achievement of a sufficient supply of agricultural products for the USSR.³⁶ Increases in the wages and incomes of Soviet agricultural workers have played a part in urban-rural

equalization. The "revolution" in the earnings of collective farmers and state farmers began during the Khrushchev years, with the raising of the purchase prices paid to farms for agricultural products and the institution of practices ensuring greater stability in compensation for collective farm workers. The earnings of kolkhozniki and sovkhozniki from work in socialized agriculture rose quickly in the middle fifties and early sixties. As a result, differences in compensation between industrial and agricultural labor decreased markedly.³⁷ Further increases in wages in Soviet agriculture have been granted in the Brezhnev period. The old labor-day system has been replaced by a scale of regular wages in collective farms similar to that in state farms. Increases in the Soviet minimum wage have raised the earnings of unskilled farm workers. A national, state-regulated system of social insurance for collective farmers was introduced in 1965. Increases in pensions for retired collective farmers have been enacted subsequently. The incomes of farm workers' families have continued to rise since 1965. However, the differences between wages in industry, state farms, and collective farms have remained fairly stable since the late nineteen sixties.³⁰

Khrushchev tried to stimulate agricultural production by increasing the earnings of Soviet farm laborers. He expected that with the growth of agricultural production, collective farms and state farms would have more funds to invest in improving living conditions. A broader approach is offered by the current leadership. Wage increases alone will not retain qualified personnel in rural areas as long as living conditions there remain backward. Without the retention (<u>zakreplenie</u>) of educated specialists and trained mechanizers in rural areas, the industrialization of agriculture cannot succeed. The problem of the inferior level of living in the villages must be attacked directly, in conjunction with measures for expanding agricultural production. While before it was argued that advances in production would cause a rise in the level of living, now it is said that improvement in the rural level of living is also necessary for growth in production.³⁹

Trends toward equalization of a number of indicators of urban and rural living levels have been established in the USSR.⁴⁰ In 1965, the surtax on goods sold through rural cooperative stores was abolished. Since 1965, the increase in retail trade in rural areas, both in proportion to rural population and as a percentage of that in urban areas, has been speeded up.⁴¹ A strong trend toward equalization of the volume of retail services per capita in urban and rural areas has set in. Ownership of several types of durable consumer goods, such as refrigerators, washing machines, and television sets, has become more common among rural families.⁴² Urban-rural inequality in the possession of most consumer durables has decreased. The connection of rural homes with electrical networks was virtually completed during the nineteen seventies.⁴³ The equipping of homes in the countryside with gas connections increased sharply after 1965, and began to approach the rate in rural areas.

Growth in public services in rural areas has been achieved during the Brezhnev period, but in somewhat uneven fashion. Urban-rural inequality in enrollments in public nursery schools, kindergartens, and other institutions for pre-school children has decreased, though the gap between city and countryside is still very wide.⁴⁴ The drive to extend full secondary education to the villages has been associated with increases in rural educational attainments. While urban-rural inequality in completion of early primary (four year) education decreased in the Stalin period, and inequality in early secondary (seven or eight year) education was reduced in the Khrushchev years, inequality in complete secondary (ten year) education has decreased particularly in the Brezhnev period.⁴⁵ Inequality between urban and rural residents

in the proportion of the population having completed higher education remains extremely high. There is little evidence concerning trends in the relationship between urban and rural health care. The number of physicians in rural areas has risen only slightly since 1965, but the disparity in the availability of hospital care between urban and rural dwellers seems to have been reduced.⁴⁶

The worst bottleneck in changing rural living conditions is construction. The Soviet Communist Party's Central Committee adopted a resolution in 1968 calling for greater attention to rural construction needs. A separate Ministry of Rural Construction was organized in 1969. However, plans for the reconstruction of rural settlements remain underfulfilled.⁴⁷ The building of new homes for rural residents has remained a low priority for public investments. There have been complaints of slowness in the construction of new centers of public services. Most seriously, no adequate program for providing improved roads for the Soviet countryside has as yet been undertaken. Poor roads, and seasonal roadlessness, are among the most important causes of the isolation of village communities. Construction enterprises and associations have not been given the resources to cope with the necessary tasks; the construction industry is notoriously inefficient in the use of the resources allocated to it; and the construction of facilities used in production continues to have first claim on labor and materials.

III

The Soviet model of rural transformation recently has been subjected to changes reminiscent of trends in other industrialized countries. It is impossible to specify in terms of precise economic indicators when the need for such changes is felt in any country. Perhaps one reason the timing of "stages" of economic development seems

to be defined loosely is that a stage must be interpreted with respect to the interaction of economic, social, and political factors. It might be more accurate to speak of stages of economic <u>policy</u> rather than stages of economic development. The threshold of change is marked, not only by the conjunction of certain economic conditions, but also by shifts in popular attitudes and governmental policies. The perceptions of political leaders form a crucial connection between economic conditions and public policies. The turning point for the Soviet model of rural transformation came, not when a certain number of tractors was accumulated in the agricultural sector, but when the leadership became aware of the implications of mechanization and other conditions.

Stalin established a pattern of uneven economic development in the Soviet Union. Uneven development was accompanied by policies of exclusion of the peasants from the growing urban society, and increases in inequality between the urban and rural population.⁴⁸ The Brezhnev leadership seeks to overcome unevenness of development. In a "developed socialist society" (a socialist system of the Soviet type, with a fairly mature industrial base) the potential created by decades of industrial growth is used to raise up the backward sectors of the economy. The regime strives to eliminate the inconsistencies between subsystems. Evening up of sectors of the economy is tied to attempts at the integration of previously excluded groups into the system. The developed socialist society is said to be distinguished by a higher level of wholeness or integration (<u>tselostnost</u>').⁴⁹ But it should be remembered that in the Soviet Union, changes in the leadership's perceptions and prescriptions have run ahead of changes in practice.

The current leadership's efforts to overcome the results of uneven development have not been entirely successful. The psychological heritage of the Stalinist period in agriculture is not easily effaced.⁵⁰ While the Soviets are attempting to

make a transition to highly mechanized, large-scale, vertically integrated agribusiness, a transition begun only in recent decades in Western countries, they still are trying to eradicate the attitudes associated with subsistence-oriented peasant farming, left behind in the West much earlier during the transition to small-scale, partially mechanized, predominantly commercial agriculture. The Stalinist pattern of neomanorial agriculture perpetuated traditional peasant attitudes. Collective farm peasants looked on the requirement of labor in socialized agriculture as a levy to which they had to submit in order to obtain permission to engage in private plot farming. The peasant family relied on its private plot, primarily for satisfaction of its own consumption needs, and also to provide most of its modest cash income. The state also used the corvée liberally, mobilizing large amounts of unskilled labor to perform occasional tasks on and off the farm. The tradition of the peasant household as the basic unit of labor-intensive, self-sustaining farming was reinforced by the system of agriculture of the Stalin years.

Since 1953, Soviet leaders have increased the remuneration of labor in socialized agriculture. But incentives remain a key problem. The relationship between reward and the laborer's contribution to production is tenuous. It is not certain that increases in wages and the expansion of spending from social consumption funds are strengthening feelings of responsibility and initiative among the workers in Soviet state farms and collective farms. A Soviet writer, Fedor Abramov, argues that the contrary tendency has set in. He accuses collective farmers of regarding increased material benefits as a gift from the state. Abramov describes a psychology of dependency among farm workers, and complains that pride in work has declined since the earlier days of peasant household farming.⁵¹ As the proportion of agricultural production coming from private plots decreases, the need to rationalize incentives

and success indicators in socialized agriculture becomes even more serious. The marginal returns to investment in the transformation of the agricultural sector and of rural social conditions are steadily decreasing. Pouring more resources into Soviet agriculture seems to reveal more clearly the inefficiency of its organization. However, while changes in the Soviet model of rural transformation have included a significant reallocation of resources, they have not extended to major structural reforms. 1. The term "mature industrial economy" refers here to a stage defined some years ago by W. W. Rostow as the "stage of maturity," following the early decades of industrialization. It is not suggested here that the Soviet Union has reached the stage of advanced industrial society, which Rostow called the stage of "mass consumption." Rostow estimated that the USA reached the stage of maturity about 1900, while the Soviet Union attained that stage around 1950. Rostow, <u>The Stages of Economic Growth</u> (Cambridge: Cambridge University Press, 1960), pp. 9-10, 59.

2. M. A. Vyl'tsan, "Trudovye resursy kolkhozov v dovoennye gody (1935-1940gg.)," Voprosy istorii, 1973, No. 2 (Feb.), p. 31.

3. The principal sources of the generalizations that follow are Everett M. Rogers and Rabel J. Burdge, <u>Social Change in Rural Societies</u>, Second Edition (New York: Appleton-Century-Crofts, 1972); Lee Taylor and Arthur R. Jones, Jr., <u>Rural</u> <u>Life and Urbanized Society</u> (New York: Oxford University Press, 1964); and Irwin T. Sanders, <u>Rural Society</u> (Englewood Cliffs, New Jersey: Prentice-Hall, 1977). To date, most of the comparative generalizations in rural sociology pertain to early trends of modernization in peasant societies. Relatively little study has been devoted to common trends in agriculture and rural society in mature industrial societies. Thus many generalizations offered below should be regarded as tentative, and in need of testing with respect to a wider range of countries.

4. Rogers and Burdge, p. 129; T. Lynn Smith and Paul E. Zopf, Jr., <u>Principles</u> of <u>Inductive Rural Socielogy</u> (Philadelphia: F. A. Davis Company, 1970), p. 233; Milton M. Snodgrass and Luther T. Wallace, <u>Agriculture, Economics, and Growth</u>, Second Edition (New York: Appleton-Century-Crofts, 1970), p. 105.

5. The relationship between investment in mechanization and investment in land reclamation and agricultural chemicals varies from one country to another. The distinction between labor-intensive and capital-intensive agricultural devel-

NOTES

opment by Yujiro Hayami and Vernon Ruttan, in <u>Agricultural Development: An</u> <u>International Perspective</u> (Baltimore: Johns Hopkins Press, 1971), pp. 44-45, pertains to the relative abundance of different types of inputs for agriculture.

6. Rogers and Burdge, pp. 138-149; Taylor and Jones, pp. 219-221, 309-327;
Gail L. Cramer and Clarence W. Jensen, <u>Agricultural Economics and Agribusiness</u>
(New York: John Wiley and Sons, 1979), pp. 27-39.

7. The term "social articulation" refers to social linkage or interaction between urban and rural society. Sanders, pp. 6-8. For analyses of trends of urban-rural social articulation, see <u>ibid</u>., 152-158; Rogers and Burdge, pp. 4-10, 278-280; Taylor and Jones, pp. 32, 57-63, 93-107.

8. The classic description of that phenomenon in the United States is Arthur J. Vidich and Joseph Binsman, <u>Small Town in Mass Society</u> (Princeton, New Jersey: Princeton University Press, 1968).

9. Taylor and Jones, pp. 57, 418. However, it should be noted that even in an advanced industrial society like the United States, and despite the very high level of capitalization of agriculture in that country, there remains a measurable gap between the urban and rural population in incomes, levels of consumption, and educational attainment.

10. Among many excellent summaries of trends in Soviet agriculture since 1965 are Keith Bush, "Soviet Agriculture: Ten Years Under New Management," in <u>Economic</u> <u>Development in the Soviet Union and Eastern Europe</u>, ed. Zbigniew M. Fallenbuchl (New York: Praeger, 1976), Volume 2, pp. 157-204; David W. Carey and Joseph F. Havelka, "Soviet Agriculture: Progress and Problems," in <u>Soviet Economy in a Time</u> <u>of Change</u>, ed. John P. Hardt (Washington: U. S. Government Printing Office, 1979), Volume 2, pp. 55-86; and David M. Schoonover, "Soviet Agricultural Policies," <u>ibid</u>., pp. 87-115. 11. Figured in 1976 rubles, Carey and Havelka, p. 93.

12. <u>The Current Digest of the Soviet Press</u>, Volume 30, No. 27 (August 2, 1978), p. 13. Of course the implementation of that decision would raise the actual amount of investment in agriculture in the new plan period.

13. Aleksandr A. Barsov and Lev V. Nikiforov, <u>Agrarno-promyshlennye kompleksy</u> <u>i sblizhenie dvukh form sotsialisticheskoi sobstvennosti</u> (Moscow: Znanie, 1976), pp. 22-23. A Soviet sociologist has advised that "for the effective development of agriculture on an industrial basis it is necessary to increase its fixed capital by two and one half to three times by 1990.^H Vladimir I. Staroverov, "Preodolenie sotsial'nykh razlichii mezhdu gorodom i derevnei," in <u>Sotsial'naia struktura</u> <u>razvitogo sotsialisticheskogo obshchestva v SSSR</u>, ed. M. N. Rutkevich (Moscow: Nauka, 1976), p. 107.

14. Barsov and Nikiforov, pp. 17, 43; Lev V. Nikiforov, "Socioeconomic Problems in the Industrialization of Agricultural Production," <u>Problems of Economics. Volume</u> 19, No. 3 (July 1976), p. 85 (reprinted from <u>Ekonomicheskie</u> nauki, 1975, No. 3); Leonid Brezhnev, "On the Further Development of USSR Agriculture" (speech to the Plenary Session of the Central Committee of the CPSU, July 3, 1978), <u>The Current</u> <u>Digest of the Soviet Press</u>, Volume 30, No. 27 (August 2, 1978), p. 9.

15. Barsov and Nikiforov, pp. 27-29; Nikiforov, p. 87; I. N. Buzdalov, "Agrarno-promyshlennaia integratsiia kak uslovie i forma sotsial'no-ekonomicheskikh preobrazovanii v derevne," in <u>Problemy preodoleniia sotsial'no-ekonomicheskikh</u> <u>razlichii mezhdu gorodom i derevnei</u>, ed. E. I. Kapustin (Moscow: Nauka, 1976), pp. 95-96.

16. Barsov and Nikiforov, pp. 16, 33; G. Loza and I. Kurtsev, "The Growth of Productive Forces in Agriculture in the Tenth Five-Year Plan," <u>Problems of Economics</u>, Volume 19, No. 10 (Feb. 1977) pp. 6-7 (reprinted from <u>Voprosy ekonomiki</u>, 1976, No. 7); Brezhnev, p. 15. 17. Kenneth R. Gray, "Soviet Agricultural Specialization and Efficiency," Soviet Studies, Volume 31, No. 4 (October 1979), pp. 546-547.

18. Schoonover, pp. 106-108.

19. According to Central Statistical Administration of the USSR, <u>Narodnoe</u> <u>khoziaistvo SSSR v 1979 godu</u> (Moscow: Statistika, 1980), p. 292, the number of workers in interfarm enterprises (other than construction enterprises) increased from 78.7 thousand in 1970 to 560.1 thousand in 1979.

20. Robert F. Miller, "The Politics of Policy Implementation in the USSR: Soviet Policies on Agricultural Integration Under Brezhnev," <u>Soviet Studies</u>, Volume 32, No. 2 (April 1980), p. 179.

21. P. Simush, "Social Changes in the Countryside," <u>The Soviet Review</u>, Volume 19, No. 2 (Summer 1978) p. 37 (reprinted from <u>Kommunist</u>, 1976, No. 16). Brezhnev, p. 3: "In today's conditions, the development of the productive forces of agriculture is linked in an especially close way with the resolution of the social questions of rural life."

22. Theodore H. Friedgut, "Integration of the Rural Sector into Soviet Society," <u>Slavic and Soviet Series</u>, Tel-Aviv University, Volume 3, No. 1 (Spring 1978), p. 29.

23. Staroverov, p. 102.

24. IUrii V. Arutiunian, <u>Sotsial'naia struktura sel'skogo naseleniia SSSR</u> (Moscow: Mysl', 1971), p. 335.

25. Ian Hill, "The End of the Russian Peasantry?," <u>Soviet Studies</u>, Vol. 27, No. 1 (Jan. 1975), pp. 109-127.

26. Arutiunian, pp. 142-144; A. V. Vorontsov, <u>Kul'turnyi progress sovremennogo</u> sela (Moscow: Znanie, 1979), pp. 48-50.

27. Friedgut, pp. 31-32.

28. Staroverov, pp. 142-143.

29. Vladimir I. Staroverov, "Sotsial'nye rezul'taty i posledstviia mezhkhoziaistvennoi kooperatsii i agropromyshlennoi integratsii," <u>Sotsiologicheskie</u> <u>issledovaniia</u>, 1979, No. 4, pp. 63-76; Simush, "Differences Between Town and Country in Light of the Development of the Socialist Way of Life," <u>The Soviet</u> <u>Review</u>, Vol. 17, No. 1 (Spring 1976), pp. 32-33 (reprinted from <u>Voprosy filosofii</u>, 1975, No. 3).

30. Karl-Eugen Wädekin, "The Nonagricultural Rural Sector," in <u>The Soviet</u> <u>Rural Community</u>, ed. James R. Millar (Urbana, Illinois: University of Illinois Press, 1971), p. 160; Simush, "Differences Between Town and Country," p. 31. However, there is still controversy over the wisdom of placing industrial subdivisions on the farms. For an exchange of views on the subject, see <u>The Current</u> Digest of the Soviet Press, Volume 32, No. 47 (Dec. 24, 1980), pp. 1-3.

31. Wadekin, p. 160.

32. Ibid.; V. M. Selunskaia, <u>Izmenenie sotsial'noi struktury sovetskoi</u> derevni (Moscow: Znanie, 1979), pp. 45-46.

33. Staroverov, "Preodolenie sotsial'nykh razlichii," p. 113.

34. Wadekin, p. 171; I. M. Taborisskaia, <u>Maiatnikovaia migratsiia naseleniia</u> (Moscow: Statistika, 1979), p. 40.

35. Friedgut, p. 32. The internal passport is necessary for legal changes of residence in the USSR. Its denial to collective farmers in the nineteen thirties was a token of exclusion of peasants from urban society.

36. Brezhnev, Leninskim kursom, Volume 5 (Moscow: Politizdat, 1976), p. 503.

37. David W. Bronson and Constance B. Krueger, "The Revolution in Soviet Farm Household Income, 1953-1967," in <u>The Soviet Rural Community</u>, pp. 228-229. 38. Alfred Evans, Jr., "Agricultural Policy and Urban-Rural Equalization in the Soviet Union," paper presented at the annual convention of the American Association for the Advancement of Slavic Studies, Columbus, Ohio, October, 1978. However, despite the fact that the growth of the productivity of labor in agriculture has been slower than the growth of the productivity of labor in industry in recent years in the Soviet Union, the Tenth Five-Year Plan (1976-1980) called for a higher rate of increase of wages for farm workers than for industrial workers.

39. Lev V. Nikiforov, "Preodolenie sotsial'no-ekonomicheskikh razlichii mezhdu gorodom i derevnei," <u>Voprosy ekonomiki</u>, 1975, No. 2, pp. 3-14; Brezhnev, "On the Further Development of USSR Agriculture," pp. 3, 11.

40. Alfred Evans, Jr., "Equalization of Urban and Rural Living Levels in Soviet Policy," <u>Soviet Union</u>, forthcoming. The information in the hext two paragraphs is drawn from this source unless otherwise indicated.

41. Ibid.; includes only retail trade in state and cooperative stores. In 1979, retail trade per capita in rural areas was 44 percent of the rate in urban areas. <u>Narodnoe khoziaistvo SSSR v 1979 godu</u>, p. 453. The difference between urban and rural areas on this variable decreased from the mid-sixties to the midseventies; since that time that difference has remained fairly stable. It should be noted that rural residents of the USSR buy about 40 percent of their nonfood goods in urban stores.

42. Evans, "Equalization of Urban and Rural Living Levels." Ownership of television sets per 100 rural families rose from 15 in 1965, or 47 percent of the urban rate, to 71 in 1979, or 80 percent of the urban rate; refrigerators, from 3 in 1965 (18%), to 55 in 1979 (57%); washing machines, from 12 in 1965 (41%) to 56 in 1979 (71% of the urban rate per 100 families). From figures in <u>Narodnoe</u> khoziaistvo SSSR v 1979 godu, p. 434.

43. According to <u>Narodnoe khoziaistvo SSSR v 1975 godu</u> (Moscow: Statistika, 1976), by 1974 99 percent of collective farm households and state farmers' homes used electrical energy. However, while almost all rural homes now may be connected with one or another electrical network, the average usage of electrical energy in rural homes remains relatively low. Kira I. Taichinova, "Povyshenie zhiznennogo urovnia sel'skogo naseleniia," <u>Voprosy ekonomiki</u>, 1974, No. 6, p. 59. In Stalin's time, connecting a collective farm with a state electrical network was prohibited by law, and punishable as a criminal offense.

44. Evans, "Equalization of Urban and Rural Living Levels."

45. Alfred Evans, Jr., "The Soviet Regime and the Transformation of Rural Society," paper presented at the annual convention of the American Association for the Advancement of Slavic Studies, Philadelphia, Pennsylvania, November, 1980.

46. Evans, "Equalization of Urban and Rural Living Levels"; A.GG. Safonov, "Convergence of the Levels of Medical Services to the Urban and Rural Populations," <u>Soviet Sociology</u>, Volume 17, No. 3 (Winter 1978-1979), pp. 75-89 (reprinted from Sovetskoe zdravookhranenie, 1977, No. 1).

47. IU. Mezhberg, "Sovremennye problemy pereustroistva sela," <u>Voprosy ekonomiki</u>, 1978, No. 5, pp. 78-88; A. I. IAkushov, <u>Preodolenie sushchestvennykh razlichii</u> <u>mezhdu gorodom i derevnei v uslovijakh razvitogo sotsializma</u> (Moscow: Vysshaia shkola, 1979), pp. 169-180; Brezhnev, "On the Further Development of USSR Agriculture," p. 11.

48. James R. Millar, "Introduction: Themes and Counter-Themes in the Changing Rural Community," in <u>The Soviet Rural Community</u>, pp. xi-xii, refers to a "deliberate policy" in the Stalin period "of excluding the rural sector from the main sources as well as the benefits of economic development, which served to perpetuate the traditional social, economic, and religious institutions of rural life in the peasant isolate thereby created." 49. Leonid Brezhnev, "O proekte konstitutsii (osnovnogo zakona) soiuza sovetskikh sotsialisticheskikh respublik i itogakh ego vsenarodnogo obsuzhdeniia" (October 4, 1977), <u>Leninskim kursom</u>, Volume 6 (1978), p. 536.

50. Friedgut, p. 32.

51. "The Way We Make Our Living," <u>The Current Digest of the Soviet Press</u>, Volume 31, No. 46 (Dec. 12, 1979), pp. 9-10, 14.