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## THE PROCESS OF SOCIALIZATION OF AGRICULTURE IN THE U.S.S.R.

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**A**GRICULTURE—at least one of its basic branches, grain culture—is at present undergoing a technical revolution, the main feature of which consists in the replacement of live draft power (horses and oxen), by mechanical power (the tractor, automobile, and truck). The change in agriculture from the horse to the tractor is somewhat analogous to that which took place in industry over a century ago when man-power was replaced by the steam engine. Of course, the analogy is not absolute, since, in the first place, the tractor has not been as universally adopted as the steam engine, and, in the second place—and this is even more important—the change in agriculture to the tractor is less striking than the transition to the steam engine in industry, for the following reasons: (1) in agriculture the change is not from man to machine, but from a considerably higher power unit, the horse and ox; (2) the tractor is quite limited as compared with the steam engine in its possibilities of concentrating motive power. It is for this reason that in agriculture the replacement of the tractor by electric power will proceed at a much quicker pace than was the case in industry with steam motive power.

For agriculture, however, the invasion of the tractor constitutes the greatest technical advance which it has ever experienced. The new motive power has already resulted in the manufacture of tractor attachments and of powerful machines adapted to mechanical draft by tractors, of which the combine is at present the highest achievement.

The tractor and its offspring, the combine, are beginning, under our very eyes, to revolutionize agriculture, one of the most backward realms in the economic activity of man, which has preserved in its technical organization, up to recent times, very much that is in common with the agriculture of gray antiquity, and which has permitted the existence of small individual holdings at the cost, naturally, of the most atrocious and ever-growing waste of labor power of the small peasants and at the cost of the undernourishment and the lowering of the standard of living of these petty proprietors. Just as in industry it was not original "manu-

facturing," where motive power was still supplied by man, but the steam-operated factory which definitely proved able to crowd out the artisan (although the process had already begun with the advent of "manufactured" goods), so in agriculture it will not be the old-style farming based on horse draft power but modern, large-scale farming based on mechanical tractive power which will definitely prove able to crowd out the small peasant, although this process has already been begun by such large-scale farming as is still based on horse draft power.

The twentieth century is thus fully confirming the tenets, for a long time combatted in the most violent manner, of the greatest thinker of mankind, Karl Marx, to the effect that the extinction of small-scale production was inevitable also in agriculture.

The tractor and the combine made their first appearance in the most advanced capitalist country of today, in the United States, and have here brought about the organization of exceptionally large, centralized grain farms using mechanical tractor power. But at the present time it is the U.S.S.R. which has established the largest centralized, mechanized, tractor-operated grain farms in the world, and it is the U.S.S.R. which has established the largest number of such farms and which is continuing to establish them at a most amazing rate.

The success of state agriculture in the U.S.S.R. (the largest, best equipped, centralized, and mechanized agricultural enterprises in the U.S.S.R. are state enterprises, called "sovkhozi" or state farms) is due to a number of special features in the Soviet economic system. The most important of them are: nationalization of the land, which makes it possible to utilize large tracts of land (as a rule, of course, unclaimed land), which are free from any obstacles or the impediments of private ownership; nationalization of large-scale industry; monopoly of foreign trade; and based on the foregoing, planning of national economy, which enables the Soviet government to concentrate the necessary financial and technical resources on the speedy development of large-scale, mechanized agriculture by including in the production plan of state industry the manufacture of the necessary agricultural machines, implements, and so forth; and, finally, the management of industry not by capitalists but by the organized workers themselves, which creates an enthusiasm for work unknown in capitalist countries. The latest examples of such enthusiasm are the so-called "shock

brigades" and "socialist competitions," *i.e.*, the voluntary mobilization of special groups of workers who declare before the entire working class that they have made it a point of honor to fulfill and exceed the definite production tasks fixed by the plan for their enterprise or section of the enterprise.

The technical revolution in agriculture now in process in the U.S.S.R. is characterized, however, not only by its exceptionally rapid tempo and by the attainment, through the organization of the very large state farms, of results which have been scarcely attained by any capitalist country, even the most advanced, but also by the fact that it has drawn within its orbit the entire basic mass of millions of small and middle peasants. Whereas in capitalist countries such a technical revolution would result in the wholesale ruin of small farmers, in the U.S.S.R. there is taking place a mighty process of building up large-scale agriculture by means of uniting the small and middle peasants with the aid of the working class of the cities and that of the Soviet Government. This process of organizing the peasants into collectives, results not in a lower but in a much higher standard of living for the small and middle peasants. Under the Soviet economic system, technical progress in agriculture becomes a blessing for the entire mass of small and middle peasants. This process opens up exceptional perspectives in the matter of raising the standard of living of the broad masses of the small and middle peasantry. The organization of small peasant holdings into large cooperative associations, in other words, the change from small- to large-scale economy—although at present only partly based on a transition to tractor power, and although the available tractors are as yet not utilized nearly to the full extent possible—means the creation of such economic forms as would permit the rational utilization over the entire territory of the U.S.S.R. of the new tractor technique, which would be impossible under a system of petty peasant economy.

An idea of the immense strides forward made in the matter of reorganizing petty peasant economy in the U.S.S.R. may be gleaned from the fact that at present the collective farms embrace about one-fourth of all the peasant households in the U.S.S.R. (about six million) and more than one-third of the area under cultivation in the U.S.S.R. If we should divide the enormous territory of our country into three parts, we would find that in

the broad zone extending from the shores of the Black Sea to the Caspian Sea—comprising the Ukrainian Steppe, the Crimea, the Northern Caucasus, the Lower and part of the Middle Volga Regions, and embracing about one-fourth of the entire area under cultivation in the U.S.S.R.—the collective farms occupy about two-thirds of the area under cultivation. In the adjoining, still wider zone on the north, comprising the remaining part of the Ukraine (except the forest region), the Central Black Soil Region, the remaining part of the Middle Volga Region, the Bashkir Republic, the Ural Region, Siberia, Kazakstan, and the Kirghiz Republic, and embracing about one-half of the entire area under cultivation in the U.S.S.R., the collective farms occupy about one-third of the area under cultivation. And, finally, in the remaining sections of the U.S.S.R.—adjoining the above-named zones on the north and south and embracing about one-fourth of the entire area under cultivation of the U.S.S.R.—the collective farms occupy about one-sixth of the area under cultivation.

This amazing success of the collectivization movement, which has passed through a long twelve-year period of intensive preparatory work, has been achieved in the main during the course of a few months, from October, 1929, to May, 1930. Only a year ago the collective farms comprised only about 4 per cent of the peasant households. In the course of a few months the achievements of the collectivization movement were many times greater than those of all the previous years and also exceeded the goal set by the Five-Year Plan to be attained several years hence. At the present moment the collectivization movement has won for itself the decisive positions in the decisive agricultural regions of the U.S.S.R. At the same time, the collective farms have already achieved considerable economic successes. Although in their economic achievements they are far behind the state farms, which are a more advanced type of farm, the collective farms have already, in their first sowing campaign, considerably increased the sown area, have adopted improved methods of cultivation, and are this year affording the peasants who have joined them considerably higher incomes as compared with peasants who continue to carry on individual farming.

How did this astonishing change occur, a change from farming conducted mainly on very small parcels to collective farming conducted on a scale already comparatively large and growing

ever larger? How did this transformation take place which has obliterated in the course of a few months the thousand-year-old boundary strips separating the lands of millions of petty peasant proprietors and which is shattering their age-old customs? This change is perhaps even more amazing than the one consummated by the October Revolution, which transferred into the hands of the working class thousands of large-scale capitalist enterprises—industrial, transportation and commercial enterprises, as well as credit organizations which are now being developed on a new socialist basis at a rate heretofore unprecedented.<sup>1</sup>

The collective farm movement is a movement of the many millions of peasants themselves, but it would have been impossible without the influence of the working class upon the small and middle peasant masses and without the aid and leadership of the workers, who are in control of the state power and of the material resources of the national economy, which in the U.S.S.R. embraces practically the whole of industry and transportation. The point of view of the working class is characterized by the fact that it does not begin with a rejection of individual peasant economy but culminates in such a rejection, after stressing the fact that individual peasant economy is the starting point of a development which must pass through a number of stages. Only in this way does it lead up to a rejection of individual peasant economy.

The peasant cooperative movement under the Soviet Government, even in that period when it did not directly concern itself with the production end of agriculture, marked the initial step on the path of socialist development, as was pointed out by Lenin eight years ago. This is true regardless of the fact that the Soviet peasant cooperatives were during the last ten years the arena for a stubborn struggle between socialist and capitalist tendencies in the development of peasant economy. Due to the influence of the working class the socialist tendencies in the Soviet peasant cooperatives were victorious and the ascendancy was gained by those peasant elements who were inclined to collectivized rather than individual farming and who were looking for means of improving the lot of the large masses of small and middle peasants. Thus the Soviet peasant cooperatives served within the framework

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<sup>1</sup> The state industries of the U.S.S.R., having exceeded pre-war production in 1926-27, are now showing a yearly increase in production of from 20 to 30 per cent and are planning to make even higher gains in the coming year.

of the Soviet economic system as a preparatory school for the mass collectivization movement which developed last year, a school both for the broad masses of small and middle peasants and for the future leaders of this mass collectivization movement.

The broadening of the activities of the Soviet village cooperatives resulted in the transfer of the center of gravity of their work among the masses from the trading field (selling products, buying supplies, and so forth) to the field of agricultural production. At first the Soviet peasant cooperatives entered the field of agricultural production indirectly, without eliminating individual economy, under the system of contracting (*i.e.*, contracts between the peasants and the government for the delivery of certain amounts of agricultural products at fixed prices, the peasants usually receiving an advance allowance from the government to enable them to plant and cultivate the crops), but later they penetrated the field of agricultural production directly, *i.e.*, through the medium of collectivization.

Collectivization, in the initial stages of its mass development, did not lead the small and middle peasant far afield from the individual method of farming to which he was accustomed. For a certain period (a period when the collective farm movement was already quite widespread) the basic mass of collective farms consisted of the simplest forms of small collective farms. They were merely small associations for the common cultivation of the land, frequently without these lands being concentrated in one place and without the whole of the land-holdings of their members being included in this common cultivation. This stage is now a thing of the past and has been left far behind.

Under the Soviet economic system the process of consolidating small and middle peasant holdings is radically different from a similar process under capitalism. In capitalist countries peasant consumers', producers', and credit cooperatives rise as a result of the contradiction between the limited range of small-scale farming and the power of the market. In capitalist countries the cooperatives are from the very beginning dependent on capital (primarily on the large banks), and the capitalist strata of the peasantry predominate in them. Under the Soviet economic system peasant cooperation is radically different in character, as Lenin pointed out. It assumes a socialist character. In particular, there is a radical change, under the Soviet economic system, in the



character of the cooperative organizations of small and middle peasant holdings in the basic sphere of agricultural production. Such organizations arise also in capitalist countries in the form of joint ownership of machines (sometimes also of other means of production) or in the form of "rings," *i.e.*, the joint utilization of private means of production on private farms, representing the simplest types of cooperatives of small and middle peasants in the basic sphere of agricultural production. In these cooperatives the contradiction between small-scale farming and the productive forces which extend beyond its limits becomes apparent.<sup>2</sup>

In capitalist countries producing cooperatives of small and middle peasants have the same characteristics as other forms of peasant cooperation, in that they do not by any means do away with the private-property character of the peasant holdings of which they are composed. For this very reason producers' cooperatives of small and middle peasants in the basic sphere of agricultural production in capitalist countries are inevitably of a very superficial character, since they are concerned only with a small part of the agricultural problems of their members, and since they are in most cases very unstable associations, organized only for brief periods as the occasion arises.<sup>3</sup>

Under the Soviet economic system the character of producers' associations of small and middle peasants is radically different. These cooperatives, like other forms of peasant cooperation, assume a socialist character.

The simplest producers' associations of small and middle peasants in the basic sphere of agricultural production become under the Soviet economic system the starting point in the transition process being undergone by petty peasant economy from individual to socialized production. They take on a definite form, acquire in the course of their development an ever more stable and permanent character, broaden their influence through strengthening their ties with the rest of the small and middle peasant masses, and

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<sup>2</sup> Another manifestation of the same contradiction is the organization of cooperatives for the processing of agricultural products, for land reclamation, and in general the organization of farm producers' cooperatives not concerned with the fundamental operations of agricultural production.

<sup>3</sup> On the other hand, farm producers' cooperatives not concerned with the main processes of agricultural production are not infrequently more stable organizations, resembling the non-production cooperatives, precisely because they do not destroy the private-property character of the farms joining them.

embrace ever more completely the entire farming operations of their members.

The machine association, embracing several peasant households, is one step more advanced than the joint ownership of machines. The cooperative group for the common cultivation of land, embracing several peasant households, socializing none or almost none of the cattle and none of the machinery, and often cultivating jointly only part of the land-holdings of their members, is one step more advanced than the peasant "ring" (joint utilization of private means of production on private farms). The small peasant proprietors are able to make this step forward on a mass scale only with the aid of the working class and of the Soviet Government. In this forward movement it is already possible to discern the fundamental distinguishing characteristic of producers' cooperatives of small and middle peasants under conditions of the Soviet economic system, and to observe their transition to a socialist form of development.

At the same time, the close relationship between the primitive forms of producers' cooperatives of small and middle peasants (including the primitive forms of collective farms) and individual peasant economy plays an important rôle in the problem of putting the basic masses of the peasantry on the path of socialist development. The chief problem here is to bridge the gap between individual and socialized economy, to create transition forms acceptable to the petty proprietor, to find that harmonious correlation between private and social interests which would make such a transition easy for him. Although in the nature of an historic necessity, these original (simplest) forms of collective farms—very unstable, subject to a reversion to capitalism, and easily becoming a cloak to conceal their capitalist content (the so-called mock collectives)—cease to play the rôle of necessary stages in further development as soon as the higher forms of collective farms have penetrated to a sufficiently wide extent.

Other very important stages in the socialist development of the collective farms were: Organization of land for the cooperative groups for the common cultivation of land; socialization of the means of production of the members; and, finally, the formation of so-called non-divisible capital funds of the collective farms.

Organization of land, *i.e.*, the bringing together of tracts of land into one piece and the obliteration of boundary strips, marks

the transition from a collective utilization on the individual farms of the means of production of the members of the cooperative group to a collective utilization of the private means of production of the members of the cooperative group on their communal lands (at least as regards field crops). After the organization of the land has been carried out the cooperative group for the common cultivation of land passes on to the next higher stage of development.

The socialization of the means of production of the members of a cooperative group constitutes another step forward—the joint use of common means of production in a common enterprise. The collective farm has thereby reached a higher stage of development; it has changed from a cooperative group for the joint cultivation of land into an agricultural *artel*.

Finally, by creating the so-called “non-divisible capital funds” of the collective farms, their means of production acquire such a form as makes it impossible for them to revert to private means of production. The so-called “non-divisible capital funds” of the collective farms are no longer simply group property but already actually constitute socialized property, which for the time being is used by the given collective farm, since in case of the dissolution of the collective farm the property is not divided among the members of the collective but is transferred to other collective farms for use. By the formation of these non-divisible capital funds the agricultural *artel* passes on to the next higher stage of development. If in addition to completely socializing the means of production the collective farm also creates enterprises to take care of the individual needs of its members, such a collective becomes a *commune*.

The term “collective farm” is used to designate a most diversified mass of agricultural enterprises, which form an endless chain connecting the individual petty peasant holding with its opposite extreme, the large-scale state enterprise, the state farm. Approximating the state farms most closely in their organizational form are those collective farms which are served by state machine-tractor stations. Such stations constitute the most important, although not the only example of combination of a state enterprise with collective farms.

While in their lowest forms the collective farms constitute consolidations of private holdings, exhibiting, as a rule, a growth in

elements of socialization, in their highest forms they constitute various types of socialized farms with remnants of some of the old private-property traditions of their members, while they are differentiated from the state farms by the fact that they are not state enterprises.

The outstanding feature of the collectivization movement consists in the fact that it is a movement of the small and middle peasantry, consequently a movement of the petty bourgeoisie toward socialism. This mass movement of millions of peasants is essentially a voluntary movement, prepared for by the entire previous development of the U.S.S.R. The violations of the principle of voluntariness, which took place to a considerable extent in the spring of this year on the part of the local organs of the Soviet power, were, as is known, definitely stopped by the intervention of the central organs of the Soviet power. But the petty bourgeoisie—the petty proprietors operating individual farms—is unable independently to pass over to the method of collective economy. Only under the leadership and with the help of the working class, which is in control of the state power and of the material resources of national economy, has our small and middle peasantry been able to achieve a mass transition to the method of cooperative groups and to collective farming, a transition which from its very beginning is raising the standard of living of the peasantry and enabling it to take part in the technical revolution in agriculture.

This sweeping process has, of course, been developing in an exceedingly stormy fashion. Regardless of the fact that the peasants were better organized than ever before and that their organizations had very deep roots, embracing the very foundation of their economic existence, the collectivization movement revealed obvious features of an uncontrollable elemental force. To what extent the tempo of collectivization was unforeseen is evident from the enormous under-estimation in the program for the collective farm movement as set forth in the comparatively recently adopted Five-Year Plan, an under-estimation which became evident almost immediately after the adoption of the Plan. In the course of a few months the collectivization movement has by far transcended the limits set for it by the Five-Year Plan for the end of the five-year period.

The movement for the collectivization of farming aroused great

enthusiasm among the masses of small and middle peasants during communal plowings. At the same time it was accompanied by such features as the wholesale slaughter of cattle prior to joining the collective farms, the sale of inventory at ridiculously low prices and the withholding of seeds.

To what extent the process of socialization has taken deep root in the Soviet soil may best be illustrated by the fact that many individual peasants, small and middle peasants who were not members of collective farms (in particular those who had left collectives) and did not wish for the time being to join the collective, nevertheless cultivated their land collectively. These individual peasants (in the Central Volga Region, for instance, they comprise 15 to 20 per cent of all households) do not realize that they are really members of collectives. On the contrary, they do not wish to call themselves members of collectives and do not wish to give definite form to their collective working of the land, for which reason they are not entitled to any of the privileges granted to members of collective farms. The fact, however, that these peasants are in reality members of collectives without being conscious of it brings out even more clearly what deep roots the process of socialization of peasant economy has struck under the Soviet economic system and how clearly the entire mass of small and middle peasantry sees the advantages of the collective method of carrying on agriculture.

Of course, it would be too much to expect that such a tremendous change, involving the very bases of existence of a hundred million people, could take place smoothly, without any temporary disturbance whatsoever, without waverings and temporary withdrawals from the collective farms on the part of some of the peasants who had joined them. Astonishment should not be evoked by these temporary disturbances, due to a considerable extent to the failure of local representatives to carry out the policy, set forth by the central organs of the Soviet power, of strict observance of the principle of voluntary membership in the collective farms. Astonishment should be evoked by the tremendous volume of profound changes which have taken place within so short a space of time and by the positive economic accomplishments already achieved as a result of the *first* sowing campaign of the newly established collective farms.

The victory of the collective farm movement among the small

and middle peasantry is a victory in the sphere of agriculture in the Soviet Union of socialist over capitalist principles of economy. It is a victory which is necessarily bound up with the fact that the small and middle peasantry were brought face to face with the economic superiority of the collective farms over individual farms and with the fact that the resistance to the collective farm movement on the part of the capitalist strata of the peasantry of the U.S.S.R. (the "kulaks") was overcome.

Of decisive importance in the collective farm movement has been the appearance of a number of large collective farms. The victory of the collective farm movement took place not when the collective farms had demonstrated their superiority over the farms of the small and middle peasants. It took place when the collective farms had demonstrated their superiority over the large capitalist ("kulak") farms, *i.e.*, not only over the present level of farming of the middle peasant but over that possible future level toward which he as a petty proprietor has been striving although he has very rarely attained that level. The collective farm and the kulak came forth as two mutually exclusive, opposite forces inimical to one another. The collective farm was the antithesis of the kulak; preference by peasants for the collective farm was a sign of renunciation on their part of the ambition to become real proprietors, *i.e.*, kulaks.

As long as the middle peasant believed that his advancement as a private proprietor promised him more (or at any rate not less) than enrollment in a collective farm, the collective farms, at that time small for the main part, had little attraction for him. Only when the superiority of the collective farm over the large, capitalist ("kulak") farm became manifest, did the middle peasants join the collective farms *en masse*. But only the larger collective farms exhibited this superiority. And these larger collective farms could only develop thanks to the existence of large state farms. The latter, like the machine-tractor stations, have thus played an important rôle in the success of the collective farm movement in addition to their achievements in their own field.

But if the decisive moment in the collective movement was the appearance of large collective farms, setting in motion the great mass of the middle peasantry, the difficulties of the long preparatory period of the collective farm movement (which began in 1918 when the Committees of Poor Peasants were organized)

and the burden of the pioneering work in the collective farm movement, lay mainly on the farm laborers and poor peasants, who constituted the advance guard of the members of collectives. Without the prolonged labors of this advance guard such an exceptional up-surge of the collective farm movement as occurred in 1929-30 would have been impossible. They constituted a direct support of the working class in the reconstruction of the Soviet village.

The collectivization movement, which has assumed such large dimensions by drawing into the collective farms the farm laborers, and has made it no longer necessary for the small and middle peasants to rent livestock and implements from the rich peasants (kulaks), constitutes in itself a sharp and ever-progressing contraction of the economic base of the capitalist strata of the peasantry (the kulak class), which has evoked violent resistance on the part of the latter to the collective farm movement.<sup>4</sup> Being in the interests of the great mass of the small and middle peasants, the collective farm movement went strongly against the interests of the capitalist strata of the peasantry. In areas where collectivization became complete, *i.e.*, where it embraced almost the entire mass of small and middle peasants, the struggle with the capitalist strata of the peasantry, the kulaks—who violently opposed and tried by all means to defeat collectivization, which was threatening their future existence—resulted in the complete liquidation of the kulaks as a class and in the expropriation of their properties in favor of the collective farms.

The gigantic sweep of the collective farm movement was made possible solely in consequence of the successes of socialist industrialization in the Soviet Union. These successes created those technical and, in part, organizational precedents without which the present sweep of collectivization would have been impossible. The tremendous growth in the production of agricultural machinery, the growth in the production of building materials, the rise in the cultural level of the working class, which had proved able to turn out tens of thousands of organizers for the collective farm movement—all these constituted direct prerequisites for the gigantic sweep of collectivization in the Soviet Union.

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<sup>4</sup> According to estimates of their trade union the number of laborers who are expected to join collective farms this year is 1,000,000 *i.e.* a majority of all the farm laborers employed on private farms.

At the basis of these prerequisites lies, as already stated, the development of socialist industrialization in the Soviet Union. The tempo of development of manufacturing industries in the U.S.S.R., which is almost entirely in the hands of the state, can be illustrated by the data in table 1.

As early as in 1926-27 the gross output of manufacturing industries in the Soviet Union had exceeded the pre-war volume.

As is well known, as a result of this unprecedented growth of industry, the Soviet Union is at present experiencing a shortage

Table 1. Annual Increase in the Gross Value of the Output of Manufactured Products in U.S.S.R., 1920-21 to 1930-31

Year	Annual increase in gross value of output of manufactured products (in percentages)
1920-21 (compared with 1920).....	32*
1921-22.....	33*
1922-23.....	48*
1923-24.....	22*
1924-25.....	53*
1925-26.....	45*
1926-27.....	17*
1927-28.....	21*
1928-29.....	23**
1929-30.....	32**
1930-31 (estimated).....	47**

\* At pre-war prices.

\*\* At 1926-27 prices.

not only of skilled but even of unskilled workers. The supply of labor on the labor exchanges lags considerably behind the demand.

This extraordinary growth of industry has fundamentally changed the relative position of industry and agriculture in the national economy of the Soviet Union. Agriculture in the U.S.S.R. has shown an increase from year to year in its commodity production (if we take agricultural products in the aggregate and not individual output). But in recent years the increase in commodity production in the field of agriculture, carried on in the main by small individual producers (the majority of whom, despite all the successes of cooperation, have not yet joined cooperative groups) has proved insufficient, because this growth of commodity production in agriculture has lagged behind the far greater growth of industry, which, for the main part, is in the



hands of the Soviet state. This insufficiency is clearly revealed by the data as to agricultural production and exports, given in table 2.

Thus, contrary to the situation in 1926 and 1927, when the increase in the marketable production of agriculture was accompanied by a still greater increase in agricultural exports, in 1928 and 1929 the progressive gain in the marketable output of agriculture was attended by a decline, instead of a gain, in agricultural exports. This shrinkage in agricultural exports, along with the difficulties in the supply of food and raw materials, indicates clearly the insufficiency of that growth of marketable output of which the agriculture of the U.S.S.R., composed largely of small producers, has shown itself capable.

Table 2. Annual Growth of Soviet Agriculture, 1925-26 to 1928-29

Year	Annual growth (in per cent)	
	Marketable production	Exports
1925-26.....	+30	+51
1926-27.....	+4	+8
1927-28.....	+7	-30
1928-29.....	+10	-4

Another factor which shows this insufficiency of the growth of marketable farm products, is the index of agricultural prices, both absolute and relative to the index of industrial prices. From 1928 on, we have had in the U.S.S.R. an advance in agricultural prices, both absolute and relative to industrial prices. This increase of agricultural prices reflects likewise the insufficiency of the agricultural output and specifically of the growth of the marketable output.

In a word, the agriculture of the U.S.S.R., based primarily on small peasant production, taken as a whole with all its branches, has proved incapable, despite an increase in the marketable output, of meeting those requirements which the rapidly developing industry of the country has placed upon it.

Furthermore, the agriculture of the U.S.S.R., composed as it was of millions of small units, not only showed itself incapable of developing the same rate of progress as that maintained by the industry of the country but, due largely to the uncontrolled and almost elemental character of its development, it came into

conflict with the planned and controlled development of the state industries of the U.S.S.R.

The elemental character of agricultural development manifested itself in the uneven movements of its branches. Contrary to the progress made by industry, which has been uninterrupted in *all* its basic branches, the progress of agriculture, even in recent years, has been irregular in character, with a succession of ups and downs in the various branches. Thus, if we take as an example, a few of the larger branches of agriculture, we obtain the picture shown in table 3.

The movements of the total output and the marketable surplus of agriculture (expressed in 1926-27 prices) presented like con-

Table 3. Annual Growth in Sown Area and in Number of Livestock, 1926 to 1928

Year	Annual growth (in per cent)		
	Sown area		Number of livestock*
	Grain	Industrial crops	
1926.....	+9	-6	+7
1927.....	-6	+7	+4
1928.....	+2	+19	-1

\* Expressed in terms of large stock.

trasts in recent years. The general increase in the output of agriculture in the U.S.S.R. has proceeded, as the figures show, irregularly, now involving a shrinkage in one line of output, now in another. The elemental character of the development of Soviet agriculture was bound to come into conflict with the planned development of large-scale industry and of the entire state economy of the U.S.S.R., from the very moment that the insufficient growth of agricultural production, as compared with the growth of industrial output, became apparent.

This insufficient growth was not the result of any natural conditions of Soviet agriculture but of the peculiarities of its social and economic structure. Up to very recently more than 95 per cent of the basic funds used in agriculture were in private hands. So long as the growth of agricultural production, based on small-scale, individual farming, was sufficient to satisfy the requirements of industry, which was only beginning to develop (and beginning

from a very low level), so long did this growth proceed, in the main, within the framework of small-scale organization. There was a constant growth during these years in the relative importance of the village cooperatives although there were not as yet producers' cooperatives (collectives), but principally cooperatives of other types, namely, mutual credit societies, marketing organizations, and consumers' cooperatives. These cooperatives prepared the ground for the later impetuous development of collective farming. Both the collective and state farms performed during the early years a great amount of work in strengthening their internal forces which laid the groundwork for their later extraordinary growth. The growth of the non-producing types of cooperative organizations prepared as well as foreshadowed the future transformation in the character of agricultural production itself. This change occurred when the rapid growth of Soviet state industry made demands upon agriculture which the small-scale, individual farming organization was unable to satisfy. The disparity between the social and economic structure of small-scale agriculture, on the one hand, and the demands made on it by the rapidly growing state industry, on the other, found its reflection in the difficulties of the grain supply in 1927 and 1928, which in turn led to a sharpening of the class struggle in the villages and was the prologue to the fundamental reconstruction of the social structure of agriculture in the U.S.S.R. It led to an accelerated establishment of large-scale state farms and, in 1929-30, to a revolutionary tempo in the change by tremendous masses of poor and middle peasants, under the guidance and with the aid of the working class, from private to collective economy and, in regions of complete collectivization, to the liquidation of agricultural capitalism or "kulakism."

The change, on a broad scale, from small, individual farm economy to large collective and state farms signalizes the entrance of the U.S.S.R. into an era of an extraordinary growth in the productive forces of agriculture. This growth under new organizational forms will require a complete reconstruction of the agriculture of the country, a change in the character of the existing agricultural regions, a change to specialized agricultural enterprises, and so forth.

The technical revolution in Soviet agriculture will develop fully in these new forms of large-scale, agricultural organizations. The

U.S.S.R. already enters the scene as a country in which have originated and are rapidly growing the largest and most completely organized agricultural enterprises. Whereas the industry of the U.S.S.R. still merely follows the best models of technique and technical organization of the enterprises of the most advanced capitalistic countries, its agriculture already passes beyond the limits of what capitalism has accomplished in this field.

The impending extraordinary release of the productive forces of Soviet agriculture, which is bound to be sweeping in scope, should aid in eliminating the existing disparity in the rates of development of industry and of agriculture. This process should help to eliminate the retarding influence which the insufficient growth of agriculture has exercised upon the development of industry (especially industries which produce consumers' goods) and should lead to a still more pronounced growth of Soviet industry. It should accentuate the favorable achievements in the rate of industrial growth which the U.S.S.R. has already recorded, in comparison with capitalist countries.

At the same time this great historical fact of a gigantic mass of peasants, over a hundred million strong, drawn into a powerful movement away from individual farming and private ownership of the tools of production to collective socialized economy, not only without a destruction of the productive forces of agriculture but even with a material enhancement of them, signalizes a still closer union in the future between the workers and the peasants of the U.S.S.R. It promises to convert the basic masses of the peasantry, who up to now have been to a great extent merely allies of the workers, into real and firm supporters of the working class in the work of socialist reconstruction of our immense country. It signifies a further strengthening of the Soviet economic system.

This fact creates the firmest social and economic foundation for the further advance of the U.S.S.R. along the path of socialist development. Up to now all our plans, which sometimes appeared even to us very bold and seemed to the capitalistic world often altogether fantastic, have invariably not only been realized but even surpassed by our actual accomplishments. Our Five-Year Plan, as is well known, has not only been completed in some parts and even more than completed, but it will be completed for industry as a whole, according to all indications, in 1930-31, and in all branches of national economy, in 1931-32, *i.e.*, in four years.

Had we announced plans a year ago to liquidate unemployment this year to the extent to which we have actually succeeded in doing, or to bring about the collectivization of agriculture on the scope which has been revealed in the past year, the capitalist countries would hardly have taken these projects seriously. But the U.S.S.R., a country of socialism under construction, has at its disposal extraordinary internal resources. Both the liquidation of unemployment and the development of the collectivization of agriculture are undisputed facts.

The development of the U.S.S.R. is only beginning. The socialization of the agriculture of the country, in which we have achieved this year our first decisive successes, will play a most important rôle in the present stage of development of the U.S.S.R.