Development Lines in Agriculture, 1930

It's a well-known saying that every new form of society is born from the womb of the old. Capitalism, in its breakneck development, creates an ever stronger and more powerfully concentrated production apparatus, while the number of those who have control over it is constantly shrinking. Whether ownership of this production apparatus is thereby falling into fewer and fewer hands is another question, one we wouldn't like to answer so directly. With the transition from the old situation, in which the owner of a factory was simultaneously the director of production, to public limited company capital, wide circles of small owners, with a few thousand guilders at their disposal, have become "co-owners" of the enormous factory complexes. However, for them, this "possession" is a remarkable one, because it has been practically detached from the right to dispose of this "possession." This right remains reserved for a few major shareholders who determine the management of the company. The vast majority of shareholders have nothing more than a paper entitling them to a share of corporate profits, while, even though they are "co-owners" of the industrial complexes, they don't even have any "co-determination." So, even if we leave open the question of whether the number of "owners" is increasing or not, one thing is certain: the right to dispose of the production apparatus is falling into ever fewer hands.

Marx's well-known statement that every new form of society is born from the womb of the old is now interpreted by the socialist and communist parties to mean that they see communism or socialism as a further development of the aforementioned process of concentration, whereby the right of disposal is practically concentrated even more. Industries will be "socialized," "nationalized," or "brought to the community"—or, to put it less grandly, but more accurately, they will be taken under state management. The leaders of economic life will then manage the productive apparatus "in the name of society," determining how, where, when, and how much will be produced and distributed. They will conduct price policies—in short, they will take over the functions of today's industrial barons. Just as today's capital magnates, though not the owners of

the productive apparatus, nevertheless have it at their disposal, so too do state officials, though not the owners, nevertheless have control over the productive forces and the social product.

Even though we believe that this state communism must lead directly to a fascist dictatorship against the working class (as in Russia) and cannot solve the economic problems of production and distribution, we do not wish to examine this type of "communism" further, as our only concern now is to establish that what is currently marketed as socialism or communism is nothing other than the transfer of the means of production to the state. In this respect, there is no difference between social democracy and communism of the Moscow type.

If we consider the development of agriculture alongside the development of industry, we get a completely different picture. Despite all the predictions of renowned Marxists, who argued that agriculture should also be concentrated, that small and medium-sized farmers would be displaced by large agricultural consortiums, have already shown very little evidence of this development. Not only the medium-sized farmer, but also the small farmer, has managed to maintain its position, while there is no growth of large-scale farming in the aforementioned sense. Indeed, there is even a strong growth of small-scale farming.

This state of affairs is deeply disappointing to the theorists of state communism. Industrial labor is becoming increasingly socialized, while, according to them, that of the farmer remains equally isolated. Industrial enterprises are becoming increasingly "ripe" for communism, or whatever they understand by it, while in agriculture, they simply refuse to "ripen" for centralized state management! From the perspective of state communism, agriculture is and remains a stumbling block to the implementation of communism. In our opinion, however, capitalism has brilliantly implemented the objective conditions for communism in agriculture as well. It depends solely on one's perspective whether one wants to place production in the hands of central government agencies or in the hands of the producers themselves.

If we consider the current character of agriculture, we don't see the immense concentration of production we know in industry. But despite this, agriculture has

become thoroughly capitalist, because it now follows the same form as industrial production. One of the characteristics of capitalist production is that it is commodity production. "Commodities" are objects of use that the producer doesn't make for himself, but for others. He therefore works for the market. The commodity producer produces what he doesn't consume, and he consumes precisely what he doesn't produce himself. He doesn't work for himself, but for others, for society, and his labor is therefore social labor. In the metabolic process of society, all commodity producers are thus interconnected; they exist in a state of complete interdependence, and thus, in reality is a closed whole.

The old farm knew commodity production only as a side issue. It was a nearly self-contained entity that satisfied almost all needs through its own labor. The farmer, therefore, did not work for others, for society, but for his own family. Only that which was not consumed, the surplus of his production, was destined for the market, so that these products took the form of commodities. Farming was therefore not part of social labor, and thus the farmers had an "independent" existence.

Industrial commodity production has this closed nature. On the one hand, it resulted in a flow of cheap products across the globe. On the other hand, the workings of capitalism led to increased rents, while the state also demanded ever higher taxes. Consequently, the farm needed more and more money to meet its obligations. However, it could only obtain money by acting as a commodity producer, by bringing more product to market. Two paths were open: either the farmer had to consume less while maintaining the same productivity, or he had to increase the productivity of his labor. Consuming even less than a traditional farmer, however, was an impossibility, so increasing productivity was the only solution.

And here lies the point where economists erred in their projections for the future: They assumed the same development for agricultural enterprises as for industry. In industry, ever-increasing productivity was achieved through the pooling of capital, by introducing ever more productive machinery, which could only be used in giant enterprises. Accordingly, they thought that this same process of concentration would take place in

agriculture, so that small and medium-sized farmers would essentially disappear, while agricultural consortiums would play the decisive role in agricultural production.

Our economists have been profoundly mistaken in this regard up to now. And it is remarkable, then, that the industrial development, which was supposed to bring about agricultural concentration, itself laid the foundation for a completely different development of agriculture. It was, in particular, the engine, artificial fertilizers, and agricultural science that significantly increased labor productivity without the need for industrial concentration. Thanks to modern fertilization, the nature of the soil no longer plays a decisive role; the yield per hectare increased significantly, allowing farmers to bring far more "goods" to market than before, while modern transportation provided versatile transport.

Simultaneously with the increase in yield per hectare, however, another phenomenon of great significance occurred. As soon as production is placed on a scientific basis, the phenomenon of specialization emerges with compelling force. "The specialist is a caveman," Multatuli says somewhere, "he sees only a small sliver of the universe, but he sees it very clearly." Thus, we see how farmers organize themselves to cultivate only one or a very few products, but to achieve the highest attainable given the current state of science and their financial resources. The farmer organizes his farm according to this specialization: he has only the specialized tools and implements necessary for his particular product.

This is the current state of farming in Western Europe and Australia. The farmer has, in the fullest sense of the word, become a commodity producer. What he produces, he doesn't consume himself, and what he needs, he doesn't produce. Agriculture (even more developed in horticulture and livestock farming) has thus become fully integrated into social labor. The closed-end farm has been destroyed by specialization; agriculture, etc., has transitioned to "industrial production."

While the farmer often remained the "owner" of his plot of land, his position has deteriorated enormously. Now that he works exclusively for the market, he is also completely dependent on its vicissitudes; his livelihood insecurity kept pace with his specialization. This insecurity was much greater than in industrial enterprises, because

these were not as dependent on nature. While the livelihood insecurity led to ever-increasing concentration for industrial enterprises, it took a completely different direction for the farm. This direction was determined by the state of technology in conjunction with the production conditions of the farm.

To maximize their market position, farmers joined together in agricultural cooperatives, which gave them somewhat better control over pricing and allowed them to collectively acquire modern machinery for processing the harvest. This also allowed farmers to establish their own factories, so that the dairy industry now rests directly on the farm. The dairy factory has become the focal point, dominating a wide area. Through their cooperatives, farmers have created an organization that inextricably links them all. As a result, agriculture and livestock farming are highly concentrated, yet there is no consolidation of the farms in an industrial sense.

Summarizing the above, we can conclude that modern agriculture is characterized by specialization and has therefore transitioned entirely to commodity production. Modern technology has made productivity increases possible without concentrating farms under a single umbrella. Parallel to this is the development of agricultural cooperatives, which connect farms through communities of interest, but which often result in farmers losing their "freedom" (for example, the right to control their product).

It is typical, though very understandable, that the current labor movement refuses to see this capitalist development in agriculture. Understandable, because these growth lines do not fit into their state-communist theory. The farm is socialized, the farms are welded together and operate collectively, yet they are absolutely unsuitable for state management. The so-called socialist labor movement naturally doesn't conclude from this that its state-communist theory is wrong, but it does conclude that communism is impossible as long as agriculture doesn't develop along the lines it believes scholastic Marxism prescribes.

A remarkable example of scholastic blindness is provided by S.J. Rutgers (1), who worked for many years as an engineer in Soviet Russia, in his essays on "The Peasant Question in Soviet Russia, Europe, America, India, and China" (Brusse Publishing House, Rotterdam). Rutgers is critical of the technical development of agriculture,

because "farming is essentially still at the same stage of development as it was centuries ago" (p. 7), and he further notes "a depressing decline in agriculture in Western Europe and the absence of even a single plan for real improvement" (p. 22).

II: The development of solid yield in Europe

If we ask what Rutgers means by "the same development as centuries ago" and by that "desolate decline in agriculture," the answer is that "small-scale farming has maintained itself for a large part of agriculture," while "industrialization has hardly progressed in agriculture" (p. 7). By "industrialization," he means the application of agricultural machinery in large-scale agricultural enterprises. He certainly also believes that science and technology for the benefit of agriculture have made considerable progress, but "despite a large number of machine methods in agriculture, their practical application is progressing slowly, and primitive small-scale farming persists, which even increased again in the second half of the 19th century" (p. 15).

The persistent persistence of small businesses is the pinnacle for Rutgers of backwardness, because he claims:

Labor-saving machines like tractors and threshing machines, and more intensive agricultural methods like irrigation, land clearing, and so on, are incompatible with small-scale farming. [...] "In agriculture as well as in industry" (p. 9). No wonder Rutgers has to conclude: "The process of increasing small-scale farming is accompanied by a decline in technical resources" (p. 21).

Without delving into the actual purpose of Rutger's work, we first want to examine the extent to which the picture it paints of the development, or rather the decline, of agriculture is accurate. To this end, we will first focus on the growth of small-scale farming.

The increase in small businesses

Indeed, this can be observed everywhere, for which purpose we will only give a few figures for Holland as a demonstration.

Size and number of the agricultural and horticultural companies from 1904-1921 in the Netherlands.

Hands	1-5	5-10	10-20	20-50	50-100	100+
1921	112.607	48.945	34.509	22.692	2.646	250
1910	109.62	41.439	30.821	23.798	3.278	216
1904	92.639	34.798	29.797	22.025	3.089	184
Total increase since 1904	20%	40%	15%	3%	-16%	35%

For farms under 20 hectares (ha), this means an average increase of 25%, a decline in medium-sized farms, and a sharp increase in large farms (35%). The difficulties of medium-sized farms are also reflected in the fact that the number of tenant farmers under 20 ha remained constant, increased up to 10 ha, and decreased again for 100 ha and more. The big and small can thus maintain themselves the best in the Netherlands. Although the given numbers still give rise to various comments, we will not do so here, as we simply want to point out that small businesses have indeed grown significantly.

However, the actual large increase in small-scale farming in Europe comes from a completely different source, namely Russia, Estonia, Latvia, Lithuania, Poland, Greece, Bulgaria, Yugoslavia, and Czechoslovakia, where large-scale landownership was fragmented after the war, and the number of small farmers increased by several million.

Let us now turn to the development of soil yield.

The yield of the soil per hectare

If Rutgers' pessimistic observation that "the process of growth in small-scale farming is accompanied by a decline in technical resources" is correct, this will be reflected in farm results. Therefore, we want to present the yield per hectare of cultivated area over 43 years, as obtained in Germany. The figures are taken from J. Conrad: "Politische Ökonomie" (2), IV. Teil, Jena, 1924, p. 192.

	Rye	Wheat	Oats	Barley	Potatoes
1880	840	1290	1130	1320	7100
1890	1010	1440	1260	1370	8000
1900	1440	1870	1720	1820	12300
1910	1700	1990	1840	1850	13200
1920	1150	1630	1730	1500	11480
1923	1530	1960	1830	1810	11950

Until the World War, we see a steady, strong increase in yield per hectare. Afterward, a major decline followed, which has not yet been recovered. This is related to the complete disorganization caused by the war, as well as the war indemnity imposed on Germany. Therefore, we consider the final "Normal" year 1910, we see that in Germany the yield per hectare of rye increased by over 100% in 30 years, for wheat by almost 55% (3), for oats by almost 63%, for barley by over 40% and for potatoes by 86%. The hay yield per hectare increased by almost 123% from 1893 to 1913, that is, in 20 years. (J. Conrad, p. 198).

To examine the development of yields per hectare in the various countries in more detail, we present the following table. It should be noted that the figures for 1901/1905 are not suitable for accurate comparison with the others, as the figures for 1909/1913 and 1923/1926 were calculated according to the current political division. However, we believe they can be used for a general comparison. (See table "Soil yields in 100 kilograms per hectare").

If we first examine the period from 1900 to 1914, a general increase in agricultural intensity is immediately apparent in almost all European countries. This increase is greatest in industrialized countries, or in countries between them (Holland, Denmark, Germany, Sweden, Belgium), where small and medium-sized businesses predominate.

This, of course, says nothing about whether a modern large-scale farm yields more per hectare than a modern small-scale farm, which is not currently under discussion, but the figures nevertheless sufficiently demonstrate that it is not primarily small-scale farming that is hindering agricultural development. Unfortunately, we cannot provide comparative figures regarding soil yields in horticulture, which is specifically small-scale farming. However, everyone knows that soil yields in this sector had already increased significantly.

Agricultural countries with large landholdings also showed an increase in soil yields until 1914, but progress was greater in Western Europe, so that Eastern Europe fell even further behind and thus experienced a relative decline. Nevertheless, the general increase in soil yields across Europe simply means that agriculture was making technical progress.

If we now consider the post-war figures, we don't get such a homogeneous picture. Denmark, Germany, Romania, Hungary, and Sweden saw their soil yields decline and were still unable to reach the "peace level." Russia significantly improved its potato cultivation. Spain improved its wheat cultivation by 25%, rye by about 6%, while potatoes and beets (sugar beets) declined sharply. Furthermore, the soil yields of the various countries are hovering around the 1913 level, while some have already exceeded it: Belgium, the Netherlands, France, Italy, and Bulgaria. We will return to the development of soil yields in the Eastern European states later.

Soil yields in 100 kilograms per hectare

		Wheat	Rye	Potatoes	Beet Roots
Denmark	1901-1905	27,2	17,2	120,–	267,9
	1909-1913	33,1	16,8	148,3	306,–

	1923-1926	28,–	15,5	133,5	284,4
Belgium	1901-1905	22,9	21,3	156,4	299,9
	1909-1913	25,3	22,1	186,4	274,9
	1923-1926	26,4	23,1	186,6	287,7
Britain and Ireland	1901-1905	21,9		132,–	
	1909-1913	21,2		156,4	164,5
	1923-1926	22,–		153,6	194,2
The Netherlands	1901-1905	21,3	16,–	129,7	304,6
	1909-1913	23,5	18,1	142,9	306,4
	1923-1926	27,4	18,9	193,1	317,4
Germany	1901-1905	19,–	15,6	133,9	
	1909-1913	22,7	18,6	137,7	299,7
	1923-1926	19,2	14,8	127,2	250,9
Sweden	1901-1905	16,7	13,5	87,6	
	1909-1913	21,3	15,5	102,8	307,1
	1923-1926	20,3	15,9	108,1	277,8
Norway	1901-1905	15,3	16,2	149,3	
	1909-1913	16,6	16,4	151,–	
	1923-1926	15,9	16,9	163,3	
France	1901-1905	13,6	10,6	82,5	255,1
	1909-1913	13,1	10,6	87,1	239,1
	1923-1926	13,9	11,1	88,3	243,6
Romania	1901-1905	12,5	10,–	26,2	189,9
	1909-1913	12,9	9,2	50,1	205,5
	1923-1926	8,5	7,9	56,2	161,2
Austria	1901-1905	12,4	11,6	100,–	243,9

	1909-1913	13,7	13,6	83,4	204,7
	1923-1926	13,–	12,0	95,8	255,7
Hungary	1901-1905	12,–	11,1	75,–	204,2
	1909-1913	13,2	11,8	80,2	254,2
	1923-1926	12,7	11,–	74,–	203,7
Bulgaria	1901-1905	11,4	11,1	41,5	143,1
	1909-1913	6,2	7,8	37,6	128,6
	1923-1926	9,1	8,7	41,–	151,2
Italy	1901-1905	8,9			
	1909-1913	10,5	11,–	57,6	335,5
	1923-1926	12,1	13,1	59,2	290,8
Spain	1901-1905	8,7	7,9		226,8
	1909-1913	9,2	8,7	118,1	241,8
	1923-1926	11,6	9,2	86,3	182,8
European Russia	1901-1905	6,9	7,4	65,9	147,5
	1909-1913	6,9	7,5	69,1	161,1
	1923-1926	7,2	7,5	85,2	122,1

The post-war period, therefore, does not present such a homogeneous picture. Therefore, the increase or decrease in soil yield does not directly indicate whether technical development during that period progressed, declined, or remained stable. We must therefore approach this question from a different angle, which we will do when discussing the fertilizer industry and specialization. Before we do so, however, it must be noted that increasing yields per hectare is by no means proof that farmers are doing well. Quite the opposite!

Aside from the countries that remained out of the war, the financial pressure for farmers (and not only farmers) has become an unbearable burden. The enormous increase in

national debt in all countries has driven the parasitism of lenders to unprecedented levels. Interest payments amount to billions internationally, which simply means that the holders of government bonds are parasitically extracting billions of dollars' worth of product from society every year. Therefore, the tax screw must be tightened to the limit, while the farmer, in addition, is burdened by the parasites of land and mortgage capital. Consequently, he must sacrifice a significant portion of his harvest to the purely parasitic forms of our current society.

This pressure on farmers works in two directions. On the one hand, the heavy financial burden hinders their technical development, as they cannot afford sufficient modern tools and fertilizers. This pressure thus hinders technical development. On the other hand, farmers are now obliged to extract what they can from their land; they must abandon their closed-end farms, if they still exist, to work exclusively for the market. They are forced to specialize, which increases the yield per hectare. Therefore, the increase in soil yields is not an expression of farmers' prosperity, but rather of their plight.

Since the financial burden works in two directions, one that promotes the soil yield and the other that hinders it, the policy of the state administrators must be aimed at sailing between Scylla and Charybdis (4). They can make the burden on the farmers just so great that some room remains for the farmers' own accumulation, so that they are able to purchase the necessities to increase the yield per hectare, while the excess yield can then accrue almost entirely to parasitic capital.

III: The use of artificial fertilizers and specialization in agriculture. The standardization of products.

After demonstrating that precisely those countries where small and medium-sized enterprises are predominant—the Netherlands, Denmark, and Belgium—are at the forefront of agricultural development in Europe, we believe we can say that Rutgers's statement that primitive small-scale farming is surviving is completely wrong. We now want to examine the decline of technical resources.

One of the most important factors that increased yield per hectare is certainly the use of artificial fertilizer. After the first superphosphate factory was established in England in 1843, its use developed slowly at first, then at an increasingly rapid pace, so that global consumption now amounts to billions of kilograms. Every technical improvement in the fertilizer industry directly benefited agriculture, making the conditions for applying artificial fertilizer more favorable. There is thus a direct correlation between industrial development and agriculture. The "primitive" farmer in Holland uses, in addition to his nitrogen, potassium, and 400,000 tons of Thomas flour (5), another 50 kilograms of superphosphate per hectare of cultivated area. Farmers in Denmark are so "primitive" that only 72% don't use superphosphate! The bottom line is that the "primitive" farmer doesn't have large parts of his farm directly on his property, but rather spread across the globe. Just as industrial production, when increasing productivity, moves on to "business expansion," building new factory complexes and deploying new, more productive machinery, so does agriculture, only... the complexes are in a different location and the ownership structures are different. But the economic result remains the same, and that's what matters here!

The integration of agriculture into industrial production has been accelerating over the last 25 years, primarily due to the development of chemistry and technology. For example, an improvement in steelmaking led to the development of one of the most important fertilizers, Thomas flour. Steel is made from cast iron, which requires a purification process. Most types of cast iron contain a certain amount of phosphorus as an impurity, which initially was impossible to remove. Because Sweden and England processed ores with a very low phosphorus content, they obtained the best steels and thus practically held a steel monopoly. However, Thomas succeeded in devising a process to remove the phosphorus from the cast iron relatively easily, creating a phosphorus-containing "slag" that floated on the liquid material. This slag is now finely ground and marketed as phosphorus-containing fertilizer. Thus, an improvement in steelmaking led to the unlocking of new productive forces in agriculture.

In the production of nitrogenous fertilizers, the connection between agriculture and industry is also perfectly clear. In gas production in gasworks, the "raw" gas, as obtained from coal, contains various impurities that must be removed. For example, it is mixed

with ammonia gas, which is extracted by circulating the "raw" gas through water. The water thus becomes ammonia water, which is sprayed on the fields as nitrogenous "fertilizer." Today, it is solidified by combining it with sulfuric acid, which then produces the salt ammonia sulfuric acid, which is more commercially viable. Here, we also see how an advance in technology, the transition to gas production, simultaneously unlocked new productive forces for agriculture.

The amount of ammonia sulfuric acid obtained in this way was naturally limited, as it appeared as a byproduct of gas production. However, agriculture could absorb much more nitrogen, so a means was sought to make the production of nitrogen-containing fertilizer independent of gas production. This was achieved relatively early on (1893), although the process wasn't fully developed until 1904, was applied on a somewhat large scale by a factory in Italy.

The actual major development of the nitrogen fertilizer industry is much more recent. In 1913, the first factory applying Haber-Bosch's ammonia synthesis was established in Ludwigshafen, and in 1917, the well-known Leuna Werk, which operates according to the same process, was founded. The primary purpose of this process is to produce ammonia gas (the same as that obtained from "raw" coal gas), after which it is dissolved in water, forming the basis for the many types of nitrogen fertilizer marketed by the Leuna Werke. This process utilizes the greatest achievements of technology and science to benefit agriculture. Atmospheric nitrogen is combined with hydrogen gas at a temperature of 500-600 degrees Celsius under a pressure of 200 atmospheres, which then forms ammonia gas under the influence of a catalyst.

Ludwigshafen and Leuna currently produce 600,000 tons of fertilizer annually. If one calculates the various types of nitrogen fertilizer to ammonia sulfur, the production is 1 bale per second, or 60 bales per minute, or 3,600 bales per hour, etc. (Data from "Grains, Fodder, Fertilizer," December 21, 1928).

In light of all this, it seems slightly inaccurate to speak of a "deterioration of agricultural technology" under these circumstances, as Rutgers does. On the contrary, these technologies have advanced enormously since 1913, while their use is also increasing.

Since 1913, global nitrogen consumption for fertilizer has doubled, potassium has increased by 40%, while phosphoric acid consumption has remained constant.

The United States consumes 14% more fertilizer than in 1913, an increase almost entirely due to nitrogen. In Germany, nitrogen consumption increased by more than 100%, potash by 33%, while phosphoric acid consumption decreased by 13%. France saw its nitrogen consumption increase by 100%, potash by 400%, and phosphoric acid by 16%. The Netherlands has seen an increase of 250% for nitrogen consumption, 200% for potassium, and 25% for phosphoric acid. England maintained its fertilizer consumption as in 1913.

The consumption of artificial fertlizers varies for different countries as follows:

The Netherlands	Germany	France	England	United States
100	50	20	16	5

(Data taken from “Granen” etc., 14 June 1929)

The specialization

A second factor that increased soil yields in Western Europe was the specialization of agricultural science as a secondary application. While Liebig had laid the foundation for the theory of fertilizers in 1840, the challenge now was to investigate the properties of each individual crop and experimentally determine which and how much of each fertilizer a particular plant species consumes, what the soil's water content should be, and how deep plowing should be. Furthermore, each plant had its own diseases, each of which had to be studied individually to find effective remedies. Furthermore, hereditary characteristics had to be investigated to improve species and maintain their high quality. In short: agricultural science in general, and the science of fertilizers, heredity, and disease in particular, assumed a prominent place in the application of modern agriculture and livestock farming.

Of course, not every farmer is familiar with the results of research. That is neither possible nor necessary. To achieve the highest productivity their resources allow, they

specialize in a particular product and practically appropriate the results of science to the extent that they relate to their product. As a result, the "primitive" farmer can obtain as much product from one hectare of land as would require three hectares in unscientific agriculture. The "primitive" farmer is therefore not only equipped with powerful Factory complexes where fertilizer is manufactured are connected, but also with the laboratories and experimental stations of the agricultural colleges. One could also say that agriculture has specialized to such an extent that production methods are completely parallel to those of industrial production. Chemists are exclusively concerned with the study and manufacture of fertilizers, technicians at the fertilizer factories with the technology of this industry, and biologists with the study of growth and living conditions and diseases. Specialization has become so extensive that individual companies only produce seeds and planting stock; they are therefore "seed factories." The actual "farmer" now performs the following partial work: he cultivates the seed. This process of partial work is already very clearly evident among cattle farmers. While milk used to be processed "at home" into butter and cheese, now the "raw" milk goes as "raw material" to the dairy factory, which produces the "end product."

Of the old "farm," only the name remains. The farmers are very aware of this, which is nicely demonstrated by a conversation the writer overheard on a local train in Overijssel. A farmer said in his dialect to a fellow traveler: "Yes, it's a rough time these days. It's like this: If you do one thing, you might want another." And when they continued talking about the changes in the "farming class," he said: "Farmers? Yes, farmers! Anyone can be a farmer these days. There are farmers who aren't farmers. If you can just milk and put cans on the dike, you're already a farmer. A farmer is now part of a factory."

The farm has been so fragmented by technology and science that agriculture has fallen into a chain of subprocesses, with "the farmer" becoming nothing more than a link in the chain that runs from the heights of human knowledge to the direct cultivation of the soil. What a tremendous transformation brought about by industrial production in the last century! The farmer has been lifted from his isolation and incorporated into the process of social labor! The "independent" farmer, who had managed to maintain

himself for centuries, has been reduced to nothing more than a cog in the big picture, just like everyone else!

Normalizing production

It goes without saying that agricultural specialization has not been implemented with equal force across the globe, meaning that farmers have not been drawn into the circle of the capitalist mode of production with equal intensity everywhere. This is especially true for the farmers of Eastern Europe, who are only now, through conquering their "freedom" as "independent" smallholders, able to transition from closed-farm farming to capitalist "commodity" production. But despite the varying degrees of specialization, the process is proceeding so rapidly and so universally across the globe that one can clearly recognize a fundamental law of agricultural development here. What was prepared through years of arduous effort, amidst both success and setbacks, seems to have suddenly matured, so that in America, Europe, and Australia, agriculture is moving in the same direction. This new direction, which has admittedly been pursued tentatively and tentatively for years, is now forging ahead with force: it is the path of specialization, from which the standardization of products emerges as the next step in development.

After 1914, more and more countries began creating legal regulations specifying the requirements agricultural products must meet to be eligible for export. Dairy products must have a prescribed fat content, etc., while eggs often have stipulated size, yolk mass, and air content. Typically, these regulations often originated with the producers themselves. For example, in the Netherlands, the standards are set solely by the farmers themselves, and they also exercise their own control over product quality. By guaranteeing their products with their quality mark, they attempt to expand their sales market.

It is obvious to everyone that equivalent qualities can only be obtained by normalizing working methods, which leads directly to rationalization of agricultural methods. Rationalization is taking place in agriculture just as it does in industry, only not through the path of centralized large-scale farming, but through product standardization. Farmers are obligated to "move with the times" and implement scientific farming

methods. If they fail to do so, they end up with a product that deviates from the norm, whose quality is not guaranteed, and which is therefore unsellable.

This standardization is of enormous significance from a general societal perspective. First and foremost, harvesting is greatly simplified. The uniform product is much easier to transport in bulk, while the goods can now also be easily stored in warehouses until they are ready for consumption, because:

"The collection and storage of perishable agricultural products at harvest time, preserving them from spoilage, and distributing them as needed, is a necessary part of production." (U.S. Secretary of Agriculture, in a 1924 speech.)

In the process of normalizing agriculture, America is leading the way.

> The development of national standardization of agricultural products was a gradual process [...]. However, the real progress in this area occurred during the last depression that agriculture had to endure, when every effort had to be made to rid every part of the agricultural marketing apparatus of all waste. This movement was facilitated by the leaps and bounds of agriculture into a specialty producer.

(Circular of the U.S. Department of Agriculture, August 1, 1927).

The recent nature of this development is evident from the fact that a "Bureau of Markets" was only established in 1913 to investigate the conditions for standardization, which led to the introduction of the first Standardization Act in 1916. The relevant provisions establish minimum qualities, followed by narrower tolerances for higher qualities. The more advanced the specialization, the narrower the tolerances can be. Currently, the following products are standardized in America: apples, pears, plums, peaches, cherries, strawberries, grapes, melons, tomatoes, gherkins, onions, celery, beans, carrots, turnips, cabbage, spinach; cauliflower, asparagus, rice, potatoes, tobacco, corn, all types of wheat, eggs, butter, cheese, honey, all meat and poultry, both live and slaughtered, wool, and cotton.

From this we see that practically all agriculture in America has been normalized. This means that agriculture has completely transitioned to commodity production, and the gap between agriculture and industry has been bridged! In America, there is only industry left!

A few more words about the storage of agricultural products, which is directly linked to standardization. In addition to the regulations to which the products must comply, we also find provisions for the storage of the goods, which are legally regulated. On November 1, 1924, the enormous refrigerated warehouses contained: 264,000,000 kg of meat, 27,715,000 kg of frozen poultry, 62,125 kg of butter, 43,600,000 kg of cheese, 2,000,000,000 eggs, and 5,573,000 barrels of apples. The storage and preservation of perishable goods has simultaneously developed into a new industry, which can only be conducted scientifically and which can only fulfill its purpose through the application of all technological advances. Here, too, agriculture and technology are directly interdependent.

The question now is whether all of this is specifically American, or whether the developmental trends for global agriculture are most clearly reflected here. The answer to this question is provided by the laws that followed the world war as brought about in various countries. Generally speaking, Europe hasn't progressed beyond the dairy industry in standardization laws. However, the process has progressed much further here than might be inferred from the number of laws, because farmers themselves have standardized many products, thus without government interference. This is particularly the case in the Netherlands, where almost all agriculture has been standardized, while the state as such has nothing to do with it. Denmark has standardized butter, cheese, eggs, and meat. Norway has standardized butter and cheese. Sweden has standardized butter, cheese, and meat. Finland has standardized butter and cheese. Estonia received its standardization for dairy products in 1924, as well as for eggs. Latvia has standardized butter and eggs. In the Netherlands, dairy products have been standardized since 1904, and these days, sugar beets, potatoes, vegetables, fruit, and eggs are also included. Product control is carried out exclusively by farmers' cooperatives. England received its standardization regulations for dairy products, fruit, and eggs in 1928. Ireland standardized dairy products and eggs as early as 1924, and

certain export regulations were introduced in 1927. Standardization laws are being prepared in Switzerland and Hungary. In New Zealand and Australia, standardization has been implemented for dairy products and partially for meat. Germany does not have general regulations for the entire country. However, various products have been standardized in Schleswig-Holstein, the Rhineland, Oldenburg, Hanover, Bavaria, and Württemberg.

From the few dates mentioned, it is clear that this development is something of the very recent past. It simply means that the specialization that has long been established is now also leading in Europe to a further step in the development of social production: towards standardization. With Solmssen (6), we can indeed say:

"We stand for a development that will bring the entire world's agriculture into line."

For the further development of agriculture in Europe it is therefore expected that "industrialization" will advance rapidly, however, does not mean that the position of farmers and agricultural laborers will improve. The pressure exerted on farmers by the parasitic capital of landowners and mortgage banks compels, in dire straits, "rationalization," which here takes the form of product standardization. The fruits of this rationalization accrue to parasitic capital, so it only means that the inevitable collapse of agriculture is postponed until agriculture is integrated into social labor in even higher forms of organization and production.

IV: The agricultural cooperatives

Besides laying the foundation for increased agricultural productivity, the development of industry also brought farmers to collective life. This occurred in various directions, which can be summarized by the word "cooperative."

Farmers' cooperatives are developing rapidly worldwide, a process that gained new momentum during and after the World War. In America, farmers' association began very early (1867), while in Europe it didn't begin until around 1890. The growth process

appears to be different in all countries: here it begins with small farmers, there with large ones. In America, it begins primarily with sales organizations, while in Europe, purchasing associations and the cooperative operation of agricultural industries are more prominent. Because it's impossible to provide a general picture of the current size of agricultural cooperatives in a short space, we can only demonstrate the well-known phenomenon of cooperative formation with a single example. Therefore, we would first like to make some comments about the Netherlands.

Around 1890-1895, farmers in the Netherlands were forced to take a stand against the fraudulent practices of fertilizer suppliers. Fertilizer is simply a product where the farmer is buying "a pig in a poke": he has to believe he's being sold decent goods and not junk. Indeed, counterfeits were common! To protect themselves against these scams, farmers were forced to act collectively, making purchases together and then having a sample of the batch tested. Besides the peace of mind of not being cheated, they also had the added benefit of buying more cheaply.

In the Netherlands, cooperative purchasing increased dramatically after the war, a phenomenon observed in all countries. In the Netherlands, the trend was as follows:

Cooperative purchases of fertilizer, seeds, feed, etc.

	Amount in Guldens	Share of participating cooperatives	Number of members
1904	11.880.000	855	56.192
1913	37.362.000	1177	104.455
1924	91.156.000	1586	156.054

Looking at all farms, 70% of farmers were already purchasing cooperatively in 1924. Besides purchasing cooperatives, sales organizations also emerged as a defense against trading capital. This was most clearly demonstrated in recent times by the so-called slaughter conflict in May 1929, which arose between livestock farmers on the one hand

and livestock traders on the other. In the journal of the trading capital, Vee- en Vleeschhandel (Vee- en Vleeschhandel) (7), we read the following about this:

> “Association chairman Trompetter rightly pointed out to the branches of the Association of Cattle Traders the rapidly growing threat of cooperatives that is gripping livestock exports. The cooperative cattle export slaughterhouse in Akkrum is rapidly expanding its trading influence both domestically and internationally. [...] It is time [...] that we refuse to buy cows from the commission agent of the Frisian Cooperative, who markets them in Utrecht and Rotterdam. All cattle traders must abandon these cattleThen it will yield less, and the farmers' cooperatives will feel the pinch of eliminating trade. [...] Here, the livestock trade must be focused on self-preservation, before its power is completely undermined by the gradually expanding cooperative. [...] Here, the federation president should have issued a warning: protect your interests by unitedly defending the age-old rights of the free livestock trade”.

A second direction in which farmers' association took place directly concerns the cultivation of the land and the harvest. According to Rutgers, "labor-saving machines like tractors and threshers are incompatible with small-scale farming." However, the reality is different. Here again, it is the cooperative that unites farmers for the shared use of tractors and threshers.

So, anyone who wants to determine the extent to which agriculture is mechanized based on the number of tractors and threshing machines in use is seriously mistaken. This is even more striking when we consider that it's also common for village blacksmiths or car repairers to own such machines and rent them out to small farmers. In the intensively agricultural countries of Western Europe, this part of agriculture is already largely mechanized. Despite the increase in small-scale farming, there's no sign of a "deterioration of technical aids." Of course, we're not claiming that mechanization is fully developed. Quite the opposite! After all, we're still at the very beginning of this development.

However, industry also worked in a different direction to unite farmers. Various industries directly dependent on agriculture, such as sugar, potato starch, strawboard, and dairy factories, took advantage of the fragmentation of the farmers to purchase their raw materials from them at exorbitantly low prices. This, in turn, led to the creation of sales cooperatives, and, on the other hand, these practices led to the farmers establishing such factories themselves. Currently, there are 18 strawboard factories in the Netherlands, 10 of which are cooperatives. Dutch strawboard factories control 90% of the global market supply, while 60% of production is controlled by cooperatives. % of the sugar factories are owned by cooperatives. In 1925, 25% of all butter produced in the Netherlands was processed by cooperative dairies, and 45% of all cheese.

The current situation in the Netherlands is that "trade in fertilizer, animal feed, and other business necessities, eggs and small livestock, dairy products, seed and planting material, and agricultural credit is organized more or less cooperatively. Furthermore, we have cooperative factories for potato starch, strawboard, sugar, animal feed, and fertilizer." ("Proceedings of the Groningen Agricultural Society," volume 1923/1924, p. 86).

This situation, however, is by no means exclusive to the Netherlands. For example, Meschernakow writes in an article on "The Agricultural Cooperatives" in "Agrarprobleme" Volume 1, Issue 1, 1928, on page 36 (8):

> Today, participation in an agricultural cooperative is a vital necessity for every farmer. In highly developed capitalism, farmers who do not participate in a cooperative cannot operate their farms under the current state of affairs.

The standardization of products, which we discussed earlier, constitutes a significant incentive for cooperative formation. It is a reciprocal process, or in other words: the cooperative and standardization are functionally interdependent. Standardization is only possible once the cooperative has been established and standardization has been implemented for certain products. Farmers who remained outside the cooperative must then join.

> "The standardization leads to common treatment of similar large quantities of product. It therefore presupposes the association of a large number of producers who produce the same product, and simultaneously provides their economic basis. It thus leads to the liberation of the individual farmer from his isolation and making him part of a larger whole. [...] In this way, standardization builds a bridge to the integration of farms into concerted action and thus to the idea of cooperative work. ("Bankierstag", p. 231)

It is therefore not surprising that precisely those countries that adopted product standardization have a strong cooperative structure. For example, in Denmark, 85% of dairy and beef farmers are affiliated with cooperatives. The milk from 86% of Danish dairy cows is processed in cooperative factories. Furthermore, cooperatives there control almost 100% of pig exports and 25% of poultry production. Finland processes 92% of its butter and 70% of its cheese cooperatively. Estonia processes 84% of its butter and 84% of its cheese. Australia processes 91% of its butter and 91% of its cheese. New Zealand produces 80% of its butter and 80% of its cheese. In America, 1925% of total agricultural production was sold through cooperatives. However, before 1928, it was already estimated at ¼. How fast the cooperative movement in the land of normalization still is growing, as can be seen from the following numbers:

1913 3099 sales cooperatives with a turnover of 310,000,000 dollars.

1915 5,424 cooperatives with a turnover of $635,000,000.

1925: 10,803 cooperatives with a total of 2,700,000 members. Revenue: $2,400,000,000. Of these, only 1,217 were purchasing cooperatives with a total of 247,000 members and revenue of $135,000,000.

We are thus faced with the global phenomenon that cooperative business is becoming increasingly widespread. Even though farmers have now established their own credit banks, the enormous sums currently involved in cooperative trade cannot possibly be supplied by them, so they have to borrow millions from private banks. Cooperatives are thus falling under the influence of bank capital, which is now completely destroying

agriculture as a whole will take its scope into account. Banking capital will now truly "politicize" the entire economic life, taking not only industry but also agriculture under its control. What controlling role it already plays in this process is unknown to us. For the farmer, one thing is certain: he avoids the exploitation of merchant capital, but now falls under the spell of even more powerful banking capital. He has rid himself of one parasite, only to be replaced by another.

V: The significance of the growth of small businesses in Eastern Europe

As we have already noted, the enormous growth of small-scale farming is largely attributable to Eastern Europe. Russia, Estonia, Latvia, Lithuania, Poland, Greece, Bulgaria, Yugoslavia, and Czechoslovakia proceeded to break up large-scale land ownership and redistribute it among the peasants. This undoubtedly leads, first and foremost, to a "dismal slump" in agriculture, because the existing productive apparatus, however inadequately it may have functioned, is simultaneously shattered, and the new owners, the small and medium-sized farmers, possess neither the necessary resources nor the necessary cohesion required to maintain productivity at its previous level. According to Rutgers' scholastic perspective, this initiates a regressive process; according to the lessons of Western European reality, this lays the foundations for a new progressive cycle.

In the vast regions we're discussing here, farmers often still work according to methods used in Western Europe 1,000 years ago. Therefore, there's no use of agricultural science or modern tools, which is reflected in the fact that the primitive Dutch farmer, for example, gets four times as much from a hectare of land as the Greek, Bulgarian, or other farmers Romanian or Russian. The farmers there still live almost entirely in closed-cell farming. They produce everything they need for their livelihood themselves. Farming also includes being their own baker, butcher, tailor, carpenter, oil producer, and so on. They have little money, so they often even pay the rent they had to pay to the large landowners in kind. These farmers have therefore not yet been drawn into social labor. They do not yet work primarily for the market, but for their family circle. Only

what is left over after providing for their own needs goes to market, after which they can use the money they receive to buy some industrial products, be it tools or otherwise.

It goes without saying that this closed-house economy has not been preserved equally intact everywhere. Capitalist development in Western Europe continually undermined its foundations, as industrial "commodity" production constantly sought to import goods manufactured in this closed-house economy. Thus, the agricultural countries closest to industrial centers were the first to break through the closed-house economy (e.g., Estonia, Latvia, Finland, as well as Czechoslovakia and Hungary), while Russia, Bulgaria, and Romania preserved it the longest and most completely.

Regarding Russia, Rutgers informs us that this situation has not yet been overcome in large areas. When discussing the Russian government's pricing policy, he says that industrial products are sold above cost price, resulting in an indirect tax. It goes without saying that this must hinder agricultural development, as it increases the price of agricultural implements, metal products, and textiles. However, Rutgers believes that "poor farmers are already affected very little," because they "buy very few industrial products."

"In some areas, small businesses are still practically self-sufficient, including clothing and simple tools, so that higher industrial prices have a very negative impact there play a subordinate role." (Rutgers, p. 80)."

Translated into plain Dutch, this means that these farmers are still deprived of the fruits of social labor, that the results of several hundred years of technical development are nonexistent for them. We believe that these farmers are precisely the ones affected by indirect taxes, because the possibility of being drawn into the circle of this social labor is thus blocked, or at least greatly hampered.

This, we believe, sufficiently illustrates the typical difference between agriculture in Eastern and Western Europe. In our country, it's a specialized agricultural enterprise, which can only operate with the help of modern industry and technology, where owning a piece of land is sufficient to operate as a "farmer." Besides land, a considerable sum is also needed for the purchase of fertilizer and seeds, as well as money for the cooperative

use of modern implements. In Western Europe, therefore, the primitive slogan "The land to the farmer!" is completely meaningless. If the "farmer" here only has land, they have nothing. In Eastern Europe, however, this slogan could unleash such psychic forces because agriculture is still practiced so primitively. If the farmer there has a piece of land, it is practically sufficient to operate his business. The peasant question was thus solved there very simply for the time being, with the Russian peasants doing this most radically: "The peasants divided the land and took away the means of production, with not the poorest, but the best-off peasants receiving the largest share." (Varga: "Economic Problems of the Proletarian Dictatorship" (9), p. 103). Certainly, the poorest peasants could have taken a larger plot, but that was pointless for them, since they couldn't cultivate a larger plot anyway. However, the better-off, who could employ wage laborers to cultivate the land, did have some use for such a large plot; they could also put it to work. Thus, the agrarian revolution in Russia proceeded "naturally" in every respect.

When assessing the likely slow development of agriculture in Eastern Europe (in Russia it will proceed more rapidly), we cannot proceed according to Marxist scholasticism, which places the size of farmlands, the growth of tractors, and the increase in the agricultural proletariat at the center of considerations. America, Australia, and Western Europe have demonstrated that capitalist development in agriculture proceeds through the cooperative consolidation of the entire peasant farm. Therefore, in studying the agricultural question – what's the current situation with all these things in Eastern Europe? Has the rise in small businesses also led to a "slump"? Has there been a decline in technical resources? Given the general economic turmoil, our expectations are not too high. Farmers' cooperatives are the central focus. Furthermore, attention must be paid to yield per hectare, as well as to fertilizer consumption, as this is one of the forms in which agricultural accumulation takes place, and furthermore, to specialization and standardization.

Soil yields in 100 kilograms per hectare

		Wheat	Rye	Potatoes	Beet roots
Russia	1901-1905	6,9	7,4	65,9	147,5

	1909-1913	6,9	7,5	69,1	161,1
	1923-1926	7,2	7,5	85,2	122,1
Finland	1909-1913	11,2	10,2	62,–	115,–
	1923-1926	14,8	10,5	98,2	110,8
Estonia	1909-1913	9,2 †	11,0	104,6	
	1923-1926	9,6 ‡	10,9	105,5	
Latvia	1909-1913	11,8	9,3	80,3	
	1923-1926	10,2	8,9	95,4	
Lithuania	1909-1913	10,4	9,–	66,8	
	1923-1926	10,6	9,7	104,6	
Poland	1909-1913	12,4	11,2	103,1	245,1
	1923-1926	11,9	11,2	115,1	200,3
Greece	1909-1913	9,8	10,5	42,9	
	1923-1926	6,–	7,–	?	
Bulgaria	1901-1905	11,4	11,1	41,6	143,1
	1909-1913	6,–	7,8	37,6	128,6
	1923/1926	9,1	8,7	41,–	151,2
Yugoslavia	1909-1913	10,5	8,2	40,9	208,3
	1923-1926	10,9	8,6	49,5	170,7
Czechoslovakia	1922	15,5	15,3	118,6	250,8
	1923-1926	15,6	15,–	100,1	271,7

Comments on the previous table: First, we must again point out that the figures for 1901/1905 have little comparative value, as they were calculated over the old regions. The figures for Czechoslovakia are also not comparable, as only the yield for one year is available, not the average of several years.

Russia has already achieved the "peace yield" for wheat and rye, it is coming

Potato yields are significantly higher, while beetroot yields are still significantly lower. Overall, it can be said that the distribution of large landownership has not hindered yields per hectare.

Finland shows an increase of about 30% for wheat and about 55% for potatoes, while beets are in sharp decline.

Estonia is moving around the pre-war level with a tendency to rise.

Lithuania is moving forward across the board, especially in potato cultivation.

Poland is moving closer to its pre-war average. Potato cultivation has improved significantly. Sugar beet production declined.

Greece a hopeless collapse.

Bulgaria experienced a catastrophic collapse under large-scale landownership from 1900 to 1914. After the war, an unprecedented improvement occurred. Wheat yields increased by 50%, rye by 14%, while potatoes and beets also made strong progress.

Yugoslavia improves yields of wheat, rye and potatoes, but declines in beets.

The overall picture is therefore not nearly as bleak as might have been expected. Most countries have already returned their yields per hectare to pre-war levels, and in some cases even significantly exceeded them. Aside from Greece, we can safely say that the distribution of large landholdings in Eastern Europe has not led to a decline in yields per hectare.

Now let us see how things stand with regard to the decline of technical aids.

Decline of technical aids?

In our approach, we have viewed artificial fertilizer as a technical aid in agriculture, so we can approach the issue somewhat by examining the trend in fertilizer consumption

for the countries involved. However, for several of the countries we are now considering, we do not have figures for nitrogen and potassium consumption, so we must limit ourselves to those of superphosphate. For our purpose, this is sufficient, as we only want to determine whether there is a decline in the use of technical aids. If there is indeed a decline, then consumption should be declining; if it is increasing, this indicates an increase in the use of technical aids.

Consumption of fertilizer in 1000 kilograms

	Poland	Czechoslovakia	Estonia	Latvia	Lithuania	Greece
1919	9.5					
1920	36					
1921	99	139.5				
1922	150	105.92				
1923	334	168.23	14.106	19.798		
1924	369.623	188.19	14.639	28.106	28.25	47.37
1925	594.287	215.36	24.56	53.512	51.715	67.51
1926		230	18.777	?	61.401	49.84
1927		250	23.378	68.044		59.477

Poland. The countries comprising present-day Poland already consumed 1% of the total amount of fertilizer before the war. This practically fell to zero. After some stabilization, however, consumption rose steadily and rapidly again. However, by 1925, it had only reached 40% of pre-war consumption. Consumption figures, however, show a continuous increase, so the deficit appears to be quickly being closed. The figures given include the total amount of fertilizer, specifically potash, phosphates, and nitrogen. Poland itself has 15 superphosphate factories, which regularly promote fertilizer consumption.

Czechoslovakia also has its own fertilizer industry. The increase in superphosphate consumption parallels the expansion of sugar beet cultivation, from which it can be deduced that fertilizer consumption in other sectors increased little to nothing.

Estonia. Estonia relies solely on imports for fertilizer. The figures given refer only to superphosphate. From 1923 to 1927, consumption increased by over 65%.

Latvia. The figures only concern superphosphate consumption. Over four years, we observed a 243% increase in consumption, indicating in the intensity of agriculture. No consumption is reported for 1926, because a "domestic" superphosphate industry opened in that year. We do not know how much was absorbed by agriculture from the national industry in that year.

Lithuania. Lithuania relies solely on imported fertilizers. The figures again refer only to superphosphate. From 1924 to 1926, there was a 117% increase.

Greece. Greece has a "national" fertilizer industry, which markets almost exclusively mixed fertilizers. The figures therefore reflect the consumption of mixed fertilizers. The decline in consumption after 1925 was due to the high import duties on superphosphate imposed on January 1, 1926, to protect the state-owned industry.

Bulgaria. Bulgaria still largely operates according to the two- or three-field system. Artificial fertilizer was and remains virtually unknown. Yet, its use also began here. In 1926, a total of 425 tons of all types of fertilizer were imported into Russia. Although artificial fertilizer was virtually unknown in Russia before 1905, consumption of phosphates alone had already risen to 600,000 tons by 1914. The national industry supplied 158,300 tons of this. However, during the revolution, the former Tsarist Empire lost precisely those territories where the fertilizer factories were located, so that Soviet Russia had to start over. This is now being done with feverish haste. Importing superphosphate is out of the question, as Russia has protected itself against this product with the highest customs barrier. Whether the reason for this is that large-scale imports would burden the balance of payments too much, or that domestic industry is operating at much higher costs, we cannot determine.

As fertilizer consumption in Eastern Europe steadily increases, we see progress in technological advancements. The chain that forges agriculture into social work is becoming more tightly knit. Here too, agriculture on the road to industrial production.

However, it remains an open question to what extent small farmers have been drawn into this process. The fact that Estonia, Latvia, and Finland already have their standardization laws, and Hungary is preparing them, as well as the fact that these countries have strong farmers' cooperatives, suggests that they too have already entered the circle of industrial production and are on the path to specialization. The widespread continuation of this process is therefore only a matter of time.

In his book "The Farmer's Question," Rutgers draws attention to the fact that large landownership is divided into such small plots that small farmers, under the extensive agriculture common in Eastern Europe, cannot possibly subsist on their land, forcing them to work as wage earners on large estates. This category of workers is also common in Western Europe: here, we call them agricultural laborers with a plot of land. From this situation, Rutgers concludes that the technical development of agriculture cannot progress due to the poverty of small farmers. However, we believe that some caution in this assessment is warranted.

In our discussion of yields per hectare in Western Europe, we saw that farmers' distress is working in two directions: one that hinders technical development and one that actually leads to increased productivity. Rutgers is surely no stranger to Holland, so he would know that here too, a shift has occurred from farmworkers with a plot of land to farming as their "main occupation." Distress drives farmers to cooperation and specialization: to rationalization of the farm. Only when distress is so dire that any accumulation becomes impossible can the process of specialization not progress. But that's not the situation in Eastern Europe! Given the enormous gap in land yield per hectare, it's clear that it doesn't take much to increase it by 30-40%, which would give farmers considerable room for accumulation. Italy provides a typical example of this, where farmers have become a "Battaglia del Grano," a wheat campaign was decided. Yields for rye, wheat, and maize rose by about 20% above pre-war levels, and for oats and barley by 30-40%. In countries with a much lower yield than Italy, such an increase is achieved even more easily. In this context, we recall Bulgaria, where soil yields have increased by 14-50% since 1914 without the use of artificial fertilizers. Poland also seems to leave room for farmers' own accumulation, as can be deduced from the fact that per capita cotton consumption rose from 2 kilograms in 1924 to 3.3 kilograms in 1927.

In Rutgers's view of the distribution of large landownership, this change in property relations is virtually meaningless. This seems untenable to us for a movement that arose under the pressure of farmers and stretches from the Arctic Ocean to the Mediterranean and the Asian border. Indeed, there is already a strong trend indicating that more can be extracted from the land under the new property relations than under the old, although it is not primarily the farmers who reap the benefits.

While agriculture in Western Europe has transitioned to industrial production and has become a unified organization, German agriculture is already on the verge of immediate collapse, as approximately half of the harvest falls to bank and mortgage capital in various forms. In recent years, any self-accumulation by farmers has become impossible. If German farmers muster the strength to rationalize their farms through product standardization, they will be able to "meet their obligations" for a while. If this proves impossible, the German Empire will collapse along with agriculture: the social revolution is imminent! The solution can only come by freeing themselves from bank and mortgage capital, that is, by shaking the foundations of capitalist society.

It was different in Eastern Europe. The farmers didn't have to free themselves from bank and mortgage capital, they didn't have to defeat capitalism, only the parasitic landed capital, which hindered them from increasing productivity and prevented them from entering the commodity market. Therefore, they only needed to erode landed capital to make way for their own capitalist development, which we have already achieved in Western Europe.

VI. The peasant cooperatives in Russia: NEP

While farmers in Eastern Europe may be pushed towards cooperation across the board, this process will proceed most rapidly in Russia. This country finds itself in the "unusual" position that the interests of industrial capital (95% concentrated in the state) currently run parallel to the interests of the farmers. Russian industry faces the grave difficulty of being largely dependent on the import of all kinds of raw materials, machinery, and tools from abroad, which it cannot possibly afford under current circumstances. If it could export industrial products abroad itself, it could, for example, reimport various necessities for an equal amount. However, Russian industry cannot

possibly compete on the world market because its prices are far too high. It is believed that, "if all goes well," cost prices in 1932 fell by 16.5% compared to 1927 due to rationalization of production, but they are still 10% above the world market price.

Yet Russia must somehow secure the funds to purchase foreign products. A large, long-term foreign loan would be a solution, but international capital is not yet willing to accept it. Whether this is based on political considerations, or whether the bourgeoisie considers the foreign trade of a backward agricultural country, completely dependent on the success or failure of the harvest, insufficient to guarantee repayments and interest, is of no concern to us at this stage.

The fact is that a large foreign loan has not yet materialised.

Under these circumstances, Russia is solely dependent on increasing exports of its own products.

In 1926, exports of industrial products had grown to 258 million rubles, which is expected to reach 636 million by 1932 through a major expansion of the petroleum industry.

Another source that should generate foreign trade gains is grain exports. In 1932, these are expected to increase by 380 million rubles, but this requires a 63% increase in total agricultural production. If all goes according to plan, total exports, which amounted to 750 million rubles in 1926, will return to the 1913 level of 1,500 million rubles.

The "special" situation of Russian agriculture and industry, therefore, lies in the fact that both must develop together in mutual intertwining. Agriculture can only become intensive through industry; industry can only become so through increased agricultural productivity, a situation unlike any other country in the world. Thus, we see the phenomenon that industrial capital (in this case, the state) promotes the development of agriculture.

The most important help the state can give is to call out to the peasants again and again: "Do it yourselves and form cooperatives!" The driving force being: "Get rich!" (This slogan was raised by Bukharin when introducing the N.E.P.).

The farmers have understood the slogan, so we can observe a vigorous growth of cooperatives. Russian agricultural development is thus moving along exactly the same paths that we have known in Western Europe for the past thirty years and that are currently being taken worldwide. Of the 21,400,000 farms in Russia, 36% were already cooperatives in 1927 . In 1924, cooperatives controlled 1.7% of agricultural products, by 1925 they had already reached 21.5%, and by 1927 this had increased to 25%. Calculated across individual products, they controlled 27% of grain, 44% of flax, 84% of cotton, and 92% of butter. (Figures from Rutgers)

It is also significant that the number of tractors rose from 9,000 to 32,000 in just four years between 1924 and 1928, representing a 255% increase. The amount spent on agricultural machinery rose from 62 million rubles in 1924 to 149 million in 1927. That's a 140% increase in three years. While these figures don't mean much for a giant empire like Soviet Russia, it's not the absolute size that matters, but rather the growth.

The functions of Russian cooperatives are no different from those of their sister organizations worldwide, which is self-evident, since farming is a "private" enterprise, operating, as everywhere, for profit. Here, too, the cooperatives form purchasing and sales organizations to secure the strongest possible position in the domestic market and to wage the fight against the central Soviet government. Furthermore, they form cooperative credit banks, because small and medium-sized farmers can only obtain credit this way, while also establishing organizations for the cooperative consumption of agricultural implements.

In the struggle against the Soviet government, the peasants have already successfully taken action several times. In 1921, they managed to conquer free trade in the country, and in 1928, they inflicted a significant blow on the government. Forty-five farmers refused to sell at the government-set prices, and they ultimately managed to force a

higher price. Grain exports thus became a financial fiasco for the government, causing serious difficulties for state-owned industry and the "reconstruction program" to fail completely. The state therefore felt compelled to take a stand against the individualistic peasants. The rulers feared a peasant monopoly on grain, and therefore began the construction of "state grain factories" to break this monopoly.

The state-owned grain factories constitute a "socialist sector" within individualistic agriculture. They currently comprise only 2% of the cultivated area, but "if all goes well," they will already account for 17.5% by 1933, generating 15.5% of total production. The "private capitalist sector" will then control "only" 73.2% of the product, while a good 11% will be accounted for by the "collective enterprises," or what we in Holland would call "productive associations".

The Russian rulers consider these productive associations as part of communist production. Indeed, it is a characteristic of both associations and state production that both are based on profit, a characteristic they share with all capitalist production worldwide. The difference between state-owned enterprises and associations, however, lies in the distribution of the profits generated.

In state-owned enterprises, they accrue to the state leaders, who determine how they will be spent. In associations, the profits accrue to the individual members, who use them as they see fit. Bukharin's "Get rich!" also applies to them. The associations are therefore nothing more than a specific form of capitalist cooperatives, as we know them worldwide. Therefore, they do not fall within the framework of "planned" state production. We therefore believe that the "private capitalist sector" should not be set at 73.2%, but at 73.2+11=84.2%. That is, if the plans for the state-owned grain factories, which for the time being exist only on paper, have been implemented.

As we have seen, the Russian rulers are primarily concerned with re-emerging Russia on the world market as a grain-exporting country as soon as possible, which is why they hope to have increased agricultural production capacity by 63% in 1932 compared to 1926. This increase in production is expected to be achieved by increasing the sown area and by intensifying agriculture.

New land development is necessary for the sown area, while productivity can be increased through various means.

Besides moral support for the formation of the cooperatives, significant sums are therefore spent on land reclamation and substantial credits are made available to farmers. These credits, of course, must be repaid later with interest, as profit is the foundation of all Russian production. Between 1927 and 1932, the Soviet government plans to allocate: 1 billion rubles for land improvement, reclamation, and irrigation; 290 million for the purchase of livestock and machinery; 211 million for agricultural improvement and experimental stations; and 251 million for cooperatives and industrialization. (The figures are taken from Rutgers.)

These are undoubtedly considerable sums, derived partly from direct taxes, largely from unavoidable indirect taxes, partly from corporate profits, and partly from interest payments on state credit capital, while the monopoly of foreign trade also constitutes a certain, or rather, a very uncertain, source of income. What is extracted from the Soviet Empire's millions through these various channels is used in such a way that Bukharin's "Get rich!" slogan can be fulfilled for the owners of the 21,400,000 peasant farms that Russia counted in 1927.

One wonders in vain, however, what all this has to do with communism. The entire Russian economy rests on the foundation of capitalist "commodity" production, while there is no production according to needs. The Russian Revolution brought Russia a tremendous leap forward by destroying the old obstacles that hindered the development of capitalism and prevented agriculture from being integrated into social labor. This revolution thus laid the foundations for the development of bourgeois society. The conditions for a genuine proletarian revolution are only now being prepared.

None other than Lenin testifies to this with complete clarity. In Lenin's "Collected Works," Volume 1, Volume XI, pp. 78-79 (Moscow edition) (10), he declares:

> "The victory of the bourgeois revolution [in Russia - G.I.C.] is impossible as a victory of the bourgeoisie. The dominance of the peasantry, its terrible oppression by semi-feudal landownership, the strength of the consciousness of

> the proletariat already organized in a socialist party—all these circumstances give our bourgeois revolution a special character. This characteristic does not negate the bourgeois character of the revolution. It only determines the counterrevolutionary character of our bourgeoisie and the necessity of the dictatorship of the proletariat and the peasantry for the victory of such a revolution." (Italics ours - P.I.C.)

Lenin knew very well that "the dictatorship of the proletariat and of the peasantry [was] necessary for the victory of such a [bourgeois[1]] He counted, however, on the fact that the German working class would make its proletarian revolution within the German Reich, with which the construction of communism would be essentially brought closer. For:

> The complete victory of the socialist revolution is unthinkable in one country. It demands the closest cooperation of at least some developed countries, among which we cannot count Russia. (Lenin at the Xth Congress of the CPRR. See "Inprekorr" (11), 6th year, no. 139, p. 1426 (12)).

Russia, however, remained isolated. Therefore, it alone could carry through the bourgeois revolution, i.e., it could only pave the way for the development of commodity capitalism in Russia.

> "The working class took power in its hands in 1917. But it could not think of socializing, for example, petty-bourgeois enterprise, and especially peasant farming. And in 1921 it became clear that the Russian economy is still more stubborn, and that the power of the proletarian state machine does not go beyond keeping large-scale industry, and not even the whole of it, socialized." (Bukharin, "Theory of Historical Materialism," p. 310) (13).

The implementation of communism was impossible due to the backwardness of agriculture. What the Bolsheviks were required to do by their principles—the destruction of the wage system, the abolition of capitalist commodity production—they could not. What they were required to do by the economic structure of the country went

against their principles. In short, the Bolsheviks had reached a situation that Engels so aptly describes in his "German Peasants' War":

> "The worst thing that can happen to the leader of an extremist party is to be forced to take over the government at a time when the movement is not yet ripe for the rule of the class he represents [...] What he can do does not depend on his will [...] What he had to do [...] again does not depend on him, [...] He therefore necessarily finds himself in an insoluble dilemma: what he can do contradicts his entire past, his principles [...] and what he had to do cannot be carried through. In a word, he is forced to represent not his party and his class, but the class for whose rule the movement is ripe. In the interests of the movement itself, he must carry through the interests of a class alien to him, and fob off his own class with phrases and promises, with the assurance that the interests of this alien class are his own interests. Whoever ends up in this distorted position is hopelessly lost." (14).

With superhuman effort, the Bolsheviks attempted to avoid this fate during the first three years of their rule. They resorted to military force against the peasants, with the sole result that they cultivated no more land than was necessary to meet their meager needs. The peasants demanded free trade because they wanted to make a profit, because they wished to act as capitalist "commodity" producers. In 1944/53, the NEP (the Communist Party of Russia) passed, and with it, the foundations for the new development in Russia were laid, as Lenin formulated at the 10th Congress of the CPRP:

> "We all know, if we know only the ABC of Marxism, that from this conversion [to the N.E.P. - G.I.C.] and free trade there inevitably arises the split of the commodity producers into owners of capital and owners of labor power, the split into capitalists and wage laborers, that is, the reintroduction of capitalist wage slavery, which does not fall from the sky, but grows out of agricultural production throughout the world." (15).

Yet, after the fiasco of the communist experiments among the peasants, Lenin quite consciously steered the peasantry towards capitalism. This was because he saw capitalism as an advance compared to the backwardness of agriculture. That is why

Lenin chose as his slogan: Forward to capitalism through the NEP. In the aforementioned speech at the Xth Congress he said:

> "Capitalism is an evil compared with socialism. Capitalism is a blessing compared with small-scale industry, with the bureaucracy that is connected with the fragmentation of small producers." (16).

Russia is thus moving towards capitalist development in agriculture in conjunction with state capitalism in industry. The Bolsheviks come find themselves in an extremely "skewed position." They are developing capitalism "in the name of communism." "In the name of communism" an alliance with the rising peasant capital. ("We must adapt our state production apparatus to the middle peasant enterprise, which we have not been able to transform in the course of three years." Lenin, X Congress [of the R.C.P.]) (17). "In the name of communism" anyone who opposes all this is thrown into prison or banished to Siberia! Peasant fascism under the leadership of the Communist Party!

VII. Socialization in general

Although the abolition of capitalism is the declared goal of the labor movement, one finds very little evidence in labor literature that suggests anything like a program for carrying out the social revolution. The Social Democratic and Moscow Communist movements do not rise above the phrase that the means of production must be transferred to the community, by which they mean that they must be exploited by the state. The anarchist movement directly opposes state capitalism, but ultimately exhausts itself with the slogan: "The enterprises to the workers" and "Abolition of the wage system." Any further program that would achieve this goal, any explanation of how the economy of such a system is already being prepared within capitalism, is lacking. And when an anarchist indulges in a "painting" of his imagination (Sebastiaan Faure (18): Het Universel Geluk, Uitgever: De Roode Bibliotheek (19)), his intellectual arsenal appears to operate solely on concepts borrowed from the state capitalism of Moscow and London. Faure frequently makes use of "free agreements," but that doesn't prevent the workers from having no say in "his System."

The transition from the capitalist mode of production to the communist one does not only consist in the fact that the means of production are in the hands of the "community." This is all the more pressing now that various bourgeois reformers are emerging who feel they cannot resist the tide toward communism and therefore also advocate "community property," but... while preserving the laws of motion of capitalist commodity production! (Erich Horn). Communist production and distribution, however, demands precisely the abolition of these laws of motion, the abolition of production based on wages, price, and profit. For distribution, it demands the abolition of wages with an equal distribution of the produce of human labor. This equal distribution entails an innumerable number of "injustices," but is nevertheless necessary as a transitional measure to the full-fledged communism of "taking according to need."

We would particularly like to point out that the current labor movement completely shrinks from its essential task: implementing new laws of motion for the circulation of goods. It still sees its salvation in the so-called "nationalization" or "socialization" of "mature" enterprises—that is, it wants to take large-scale industrial and agricultural enterprises under state exploitation. Small-scale industrial enterprises and virtually all of agriculture remain "privately owned" and must therefore continue to operate according to the laws of capitalist "commodity" production. This makes it impossible to destroy the foundations of the capitalist mode of production—wages, prices, and profits—and to establish new economic laws of motion for the circulation of products. That is, neither wage labor nor exploitation can be abolished, while an even distribution of the product is completely out of the question. Capitalism is not defeated, but emerges in a new form: state capitalism becomes the dominant form of production in Western Europe: commodity production remains intact across the board. Viewed in this light, the Moscow slogan of "Union of Workers and Peasants" also represents in reality an abandonment of the goals of the proletarian revolution, a compromise with capitalism, and an inability to lay the real foundations of communism.

The Group of International Communists rejects all these "socialization projects," which must lead to the most severe oppression of the working class (we cannot elaborate on this now (20)) and sees the implementation of new laws of motion for the circulation of products as the true task of the social revolution. The revolution establishes general

rules by which all enterprises independently calculate their production. Each enterprise itself eliminates surplus value and calculates only the production time of products, so that the average social production time of products can become the fundamental category of communist economic life. Here, the distinction between large and small, technically highly developed or technically primitive, industrial or agricultural, "administrative" or "productive" enterprises disappears. They can all calculate how many average social labor hours are invested in their product. The implementation of communism is therefore not the function of clever statesmen, but rather the result of the living activity of the masses themselves. The "state" has no business in production as such; the state does not produce; production and distribution are accomplished through the fertilizing self-initiative of producers and consumers. These themselves carry out planned production, the integration of enterprises on the exact basis of labor time accounting. Establishing the new law of motion is therefore the essential goal of the revolution. The victorious working class, through its Congress of Councils, calls upon all its class members in city and country to take all enterprises under their own management, under the following principle:

1. The money is declared worthless from a certain date. The unit of account is entered as the working hour.
2. All companies determine the production time of their products.
3. Similar enterprises shall immediately come together to determine the social average production time of their product.

With this, the entire business community has switched to communist production, all means of production have been socialized: they are in the hands of the community (For a more detailed discussion of labor time accounting, we refer to the article "Notes on Communist Economy" in the journal "Class Struggle," nos. 4, 5, and 6 of the 3rd year.)

Socialization in agriculture

The position taken by the Group of International Communists regarding the essence of the proletarian revolution derives in no small part from the development of peasant farming in the advanced capitalist countries. The very fact that agriculture has been fully integrated into social labor, that agriculture has been absorbed into the process of social

partial labor, that agriculture has transitioned to industrial production and yet cannot be organically incorporated into "socialism" or "communism," casts serious doubt on the solidity of "communist" theories. The entire "nationalization" or "socialization" theories, therefore, prove to be nothing more than a reformist reversal of proletarian goals.

In this booklet, we have limited ourselves to demonstrating that there is no longer any essential difference between agriculture and industry, so that both branches of production fall under the same socialization laws. Another matter, of course, is how the socially average production time for agricultural products is determined. That, however, is a topic in itself and falls outside the scope of these expositions, because then we would not have to write about "Lines of Development in Agriculture," but about the application of labor time accounting in agriculture and industry. We can therefore only point out here that modern "cost accounting" is currently applied in specialized agriculture just as well as in industry (See: "Cost Accounting in Agriculture" by S. King, London (22)), which is only possible if both branches of production follow the same process.

What attitude the peasants will take towards the proletarian revolution is impossible to say, because we have little experience in this regard. (ToIn due course, we will return to the peasants' attitude during the German revolution (23). One thing is certain: they will never become "leaders" of the revolution, because their "property-owning" ideology prevents this. The small farmers in Germany are fervent advocates of "expropriation"... except when it concerns themselves. The social revolution, which communism sees as the arrival of a new law of motion for the circulation of products, has something to offer the 1949/53. Besides the liberation of all rents, mortgages, and farm debts, the equal distribution of the social product brings about the direct and complete equality of town and country, which in practice results in favoritism for the peasant. However, the agricultural proletariat, these pariahs of capitalist society, makes a tremendous leap forward, so they have every interest in incorporating agriculture into communist production.

If we ask what significance the current farmers' cooperatives have in the implementation of communism in agriculture, the answer is that they disappear with

capitalism. They have been dislocated from their raison d'être: securing a favorable market position, and thus collapse. However, they have fulfilled their task in the development process: they have taught the farmers what organization is and what it can achieve. They have taught the farmers that they are merely cogs in a larger system. This is the essential element that reveals itself in the revolution in an entirely new form. The old form of organization has been destroyed; the principle of organization is the essential asset of the capitalist era. In this respect, too, there is no difference between agriculture and industry. Just as the industrial workers destroy the form of the old organizations, the trade unions, but revive the principle of organization in the factory organizations and councils, so too does the form of the farmers' cooperatives collapse, making way for a council organization. How the Council idea will develop in the countryside, what the construction and structure of the business organisations and Councils will be like in the countryside, is still very little to say about this, because the The revolutionary period in Western Europe has not yet taught us anything in this regard, and it is not our task to devise organizational forms for the smooth running of production. We are not venturing onto the path of fantasy and must therefore be content with the general, the essential content of things, while we wait to see in what form this generality manifests itself.

Note: The information on standardization is largely taken from: "Verhandlungen des VII. allgemeinen Deutschen Bankierstages zu Köln am 9., 10. und 11. September 1928", pp. 204-272. Publisher: Walter de Gruyter & Co, Berlin, 1928. Other sources are cited in the text.

Editorial notes

1) For Sebald Justinus Rutgers (1879-1961). The Peasant Question in Soviet Russia, Europe, America, the Indies, and China / S. Rutgers. - Rotterdam: W.L. & J. Brusse, 1929. - 142 pages.

2) Outline of the Study of Political Economy, Part IV: Statistics/J[ohann]. Conrad. - Jena: A. Hesse, 1924.-233 p.
3) The original says "80%." However, the 700 kg/ha increase in wheat yield between 1880 and 1910 represents an increase of 700/1290, or 54.3%.
4) Scylla and Charybdis are sea monsters from Greek mythology that lived in the Strait of Messina, each occupying one side of the strait; meaning: "having to choose between two evils."
5) Thomas slag meal is a phosphate-rich fertilizer patented by British metalworker Sidney Thomas (1850-1885) as a by-product of the iron and steel industry.
6) Probably referring to the German banker Georg Solmssen (1869-1957).
7) 7. De Vee- en Vleeschhandel, a trade journal for livestock traders, butchers, and exporters; it was published from 1916 to 1971.
8) Agrarian Problems, published by the International Agrarian Institute [Mezhdunarodnyj Agrarnyj Institut], Moscow. - Berlin: Verlagsbuchhandlung Paul Parey, 1928.
9) The Economic Problems of the Proletarian Dictatorship / Elugen]. Varga. Hamburg: Verlag der Kommunistische Internationale, 1921, 158 pages (Library of the Communist International; VII).
10) Lenin, On the Assessment of the Russian Revolution, 1908, in: Collected Works / Lenin. - Berlin: Dietz Verlag, 1972, Vol. 15, pp. 45-46.
11) Inprekorr, abbreviation of Internationale Pressekorrespondenz (1921-1939).
12) This quote seems to come from Lenin, Report on the Replacement of the Ablieferungsvflitt by the Natural Tax, March 15, 1921, in: Works / Lenin. Berlin: Dietz Verlag, 1972, Bd. 32, pp. 216-217; however, the formulations differ from those in the source citing the G.I.C. quotes, and which is not available to us.
13) Historical Materialism; a System of Sociology/N.I. Bukharin. - International Publishers, 1925, Chapter 7
14) The German Peasants' War / Friedrich Engels, Chapter 6 (slightly different translation).
15) Lenin, Report on the Replacement of the Delivery Obligation by the Tax in Kind, March 15, 1921, in: Collected Works / Lenin. Berlin: Dietz Verlag, 1972, Vol. 32, p. 220

16) Lenin, On the Tax in Kind: The Significance of the New Policy and Its Conditions, 1921, in: Collected Works / Lenin. - Berlin: Dietz Verlag, 1972, Vol. 32, p. 364.
17) Lenin, Report on the Replacement of the Delivery Obligation by the Tax in Kind, March 15, 1921, in: Collected Works / Lenin. - Berlin: Dietz Verlag, 1972, Vol. 32, p. 230.
18) Sébastien Faure (1858-1942), French anarchist since 1888; in 1914 he distributed pacifist and anti-militarist leaflets calling for desertion; in 1936 he joined the Durriti column during the Spanish Civil War.
19) Universal Happiness (My Communism) / Sebastian Faure. - Zandvoort: The Red Library, 1921.398 p. (3 vols.).
20) See G.I.C., Principles of Communist Production and Distribution, second edition 1935, the following fragments: XII. - The abolition of the market, a., b., c.; XV. - The introduction of communism in the agricultural sector, a., b., c.; and: Appendix.
21) Class Struggle; Revolutionary Monthly; 1926-1928, edited by Henriëtte Roland Holst-van der Schalk and Henk Sneevliet; available in the I.I.S.G., Amsterdam, 3rd year (1928), nos. 4, 5 and 6; continued as De Nieuwe Weg; Independent, revolutionary social monthly (1929-1935), in which The Development of the Farm Bedni was published in 1930.
22) Cost Accounting Applied to Agriculture as an Aid to Productive Farming/John Sidney King. -Oxford: Oxford University Press, 1927.182 p.

Note from English translators: This pamphlet is available for the first time in English and is essentially a companion to the GIC's now famous "Fundamental Principles of Communist Production and Distribution." As such, it occupies an important place in ongoing discussions about the socialization of production.

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