Alexander Chayanov

The Theory of Peasant Co-operatives

Introduction by Viktor Danilov

The Theory of Peasant Co-operatives is the first translation of Chayanov's study of the transformation of the peasant economy within a market economy and his prescription for the development of Russian agriculture. Predicting remarkably accurately the negative aspects of Stalin's collectivization program, the book offers a realistic alternative. Chayanov argues that the success of the co-operative system is dependent on combined development linking diverse forms of farming organization. Although written in the 1920s, the theoretical concepts and practical insights Chayanov offers are directly relevant to the current restructuring of Soviet agriculture, as well as to debates about smallholders in the Third World and the so-called 'informal economies' of industrial societies. The book is likely to become a basic resource for students of sociology, development studies, and Soviet studies.

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ALEXANDER CHAYANOV

Translated by
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NOTE: Some of the tables in Alexander Chayanov's original Russian text contain arithmetic inaccuracies. Since it has not been possible to check Chayanov's figures from the 1920s, the tables have been left as the author prepared them. In the English edition of the book certain cuts have been made and some tables and diagrams have been omitted.

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The Second World Series

'In the West they simply do not know Russia Russia in its germination.'

Alexander Hertzen

As a publication project *The Second World* pursues an explicit goal, admits to a bias and proceeds on a number of assumptions. This should be stated at the outset. The series will aim to let the Soviet authors and their historical predecessors in tsarist Russia speak with their own voices about issues of major significance to us and to them. It will focus particularly on their explorations of their own society and culture, past and present, but set no rigid boundaries to these; some of the texts will be more general while others will carry primary evidence, for example, memoirs, documents, etc. Many of the texts have been commissioned to reflect the most recent issues and controversies of Gorbachev's *perestroika*.

To bridge differences of culture and experience each of the books will carry a substantial introduction by a Western scholar within the field. Particular care will also be taken to maintain satisfactory standards of translation and editing.

A word about words. A generation ago the term 'Third World' was coined in its current meaning, to indicate a somewhat imprecise combination of societal characteristics – the post-colonial experience, under-industrialization, relative poverty and the effort to establish an identity separate from the superpowers, the 'Bandung camp'. This left implicit yet clear which were the other two 'worlds'. It was 'us' and 'them', those best represented by the USA and those best represented by the USSR. Much has changed since, giving the lie to crude categorizations. But in research and the media, at the UN and on television, the words and the meanings established in the 1960s are still very much with us. This makes the title of our project

intelligible to all, yet, hopefully, should also make the reader pause for a moment of reflection.

Turning to the invisible rules and boundaries behind the editorial selection let us stress first the assumption of considerable social continuity between pre-revolutionary and post-revolutionary societies. Present without past is absurd (as is, of course, the treatment of the USSR as simply the Russia of old). Next, to talk of pre-revolutionary Russia/USSR is not simply to talk of the Russians. The country is multi-ethnic, as have been its intellectual achievements and self-evaluations. Yet all the books presented are deeply embedded in Russian language and cultural traditions. Lastly, we shall aim to show Russia/USSR neither as the 'goody' nor as the 'baddy' but focus attention on the characteristics particular to it.

The Second World is biased insofar as its choice of titles and authors consistently refuses the bureaucratized scholarship and paralytic tongue which has characterized much of the Soviet writing. In other words, it will prefer authors who have shown originality and courage of content and form.

Western perceptions of the Soviet scholarly achievement, especially of its social self-analysis, have been usually negative in the extreme. This was often enough justifiable. Heavy censorship stopped or biased much Soviet research and publication. 'Purges' have destroyed many of the best Soviet scholars, with whole disciplines closed on orders from above. The Soviet establishment has excelled in the promotion of safe scholars – the more unimaginative and obedient, the faster many made it into the limelight. However, much of the hostile detachment of the Anglo-Saxon scholarship and the media orginated in its own ideological bias, linguistic incompetence and a deeper still layer of mutual miscomprehension. To understand the human experience and thought in a particular social world, one must view it on its own terms – that is, with full awareness of its context – of history, political experience, culture and symbolic meanings. This necessitates the overcoming of stereotypes rooted in one's own experience and a challenge to that most persistent prejudice of all – the belief that everybody (and everything) is naturally 'like us', but somewhat less so (and that the best future mankind can have is to be like us but even more so).

The bafflement of the mainstream of Western scholarship at the dawn of Gorbachev's reforms has accentuated the collective miscomprehensions of Soviet society. On the one hand stand those who see nothing happening because nothing can happen: 'totalitarianism' is not open to any transformation from within. On the other hand stand those to whom the USSR is at long last becoming 'like us'. Both views miss the most important point, that Soviet society is

moving along its own trajectory which can be understood only on its own terms. This makes the need to allow this society and its scholars to speak to us in their own voice, an urgent one.

Uniformity and uniformization are false as perceptions of history and wrong as social goals, but so also is any effort at keeping human worlds apart. This is true for international politics, scholarly endeavour and daily life. Half a century ago a Soviet diplomat, Maxim Litvinov, a survivor of the revolutionary generation which was then going under, addressed the League of Nations to say: 'Peace is indivisible'. The World War to follow did not falsify this statement, but amended it. Peace proved divisible but only at the heavy price of human peril. The same holds for knowledge.

Teodor Shanin
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Introduction: Alexander Chayanov as a Theoretician of the Co-operative Movement

By Viktor Danilov

Russia had arrived at the 1917 Revolution with a rapidly growing co-operative movement and with the widely accepted view that co-operatives had an important role to play in the country's future. Many people then believed – and with reason – that the co-operative movement would offer to Russian society ways of overcoming the social difficulties which inevitably accompany economic modernization rooted in industrialization. What seemed particularly important for Russia's agrarian society was the opportunity of involvement in a market economy through the extension of co-operation to an enormous mass of small peasant households. Indeed, over a period of some fifteen years the country had seen the growth of a broad network of consumer, credit, agricultural, craft, trade and other types of co-operative. By the beginning of 1902, a total of 1,625 co-operative associations had been registered in Russia: by the beginning of 1912 the numbers were 18,023; and by the beginning of 1915 they had reached 35,200. Their membership, according to approximate calculations, comprised between 11 and 12 million households. Given that a peasant family had on average 5 to 6 members (and it was the rural type of co-operative which decisively predominated) this meant that up to 60 million people, that is one third of the population of the Russian Empire,[1] were directly drawn into the sphere of influence of the co-operative movement.

In Russia, as in all other countries, the growth of co-operation did not come about simply 'from below', spontaneously or of its own accord. From the very beginning, the most important factors in its growth were public awareness, the active role of the progressive intelligentsia and – after the revolution of 1905–7 – state support for

the creation and development of a system of small-scale co-operative credit. It seemed that an answer had at last been found to the most agonizing question of the post-reform period: how to rescue the peasant population of Russia from ruin and proletarianization – from the destruction of the peasantry as a class. Between the 1860s and the 1880s, the *narodniki* (populist movement) had hoped, with the assistance of an egalitarian type of land commune, to 'keep capitalism out' of the Russian countryside and lead the countryside directly to socialism. Following the example of Robert Owen, they tried to create socialist communes based on politically conscious members of the intelligentsia and farming partnerships of poor peasants. But these naive hopes did not survive the ordeals of life.

The initial Marxist critique of the *narodnik* illusions was a persuasive one: the commodity-capitalist development of the Russian economy was inevitable; and it occurred as an objective historical process which could not be prevented either by the commune or by the peasant partnership (*artel'*). Large-scale production based on machinery created new opportunities for the development of society, for the enhancement of its material well-being and culture and for the social emancipation of Man. But at the same time, this kind of production played a powerful role in dictating the transition to a market economy and swept out of its path the natural-patriarchal forms of small-scale production which typified the peasant and craft economies of Russia. The appearance and growth of the proletariat became the main social factor determining the present and future of the country. This was the interpretation from which the Russian Marxists started out, linking their hopes with the proletariat in political struggle for socialism.

However, this common interpretation of the historical process did not entail any unified political strategy or course of action amongst the different schools of Russian Marxism – nor, in particular, between its two main tendencies, the Bolshevik and the Menshevik. The Social-Democratic (Menshevik) tendency directed its political activity mainly into parliamentary channels. It put a great deal of effort into work in trade union, co-operative and cultural-educational organizations. It was from among the Mensheviks that many of the Soviet co-operative leaders emerged, including the head of the Central Association of Consumer Co-operatives in the 1920s, L. M. Khimchuk. (For Lenin, the name of this co-operative activist became a term of description: 'Khimchuk is useful because he knows how to create shops', 'the Khimchuks are doing useful work' and so on.)[2] The Bolsheviks did not refuse to undertake practical work in the co-operative system and other 'legal' organizations. However, they regarded this work as something of secondary importance which

represented, all in all, merely an attempt to adapt to existing conditions – whereas the main task was to achieve a radical change in existing conditions, through a political and social revolution. This attitude, however, substantially limited the influence of the Bolsheviks on the co-operative movement – both as Marxist theoreticians and as political leaders; and it did so not only during the pre-revolutionary period but also following the 1917 Revolution. So far as Lenin was concerned, it took the entire experience of revolution to enable him fully to appreciate the merits and potential of the co-operative system.

For both the Bolsheviks and the Mensheviks, moreover, the field of co-operative activity was confined before 1917 to consumer societies of industrial workers, since in co-operatives of other kinds there was practically no participation by workers. Furthermore, the peasant and craftsmen's associations were trying to defend what seemed outdated forms of small-scale production – an activity which, in the eyes of the Marxists of that time, seemed to be, if not reprehensible at all events useless. This dogmatic mistake did a good deal of harm and caused a good many difficulties during the period after the Revolution.

By the beginning of the twentieth century, the crisis of Russia's small-scale production both in industry and in agriculture became generally recognized. But, only in the last analysis was it reflected in the growth of the working class; a much more widespread and obvious result of this crisis was the mass pauperization of the population: the non-proletarian impoverishment of the working people, which is familiar in developing societies today. In these conditions, for socialists the defence of small-scale production not only ceased to be useless, but became indispensable. The possibility of fairly effective solutions to this problem by means of co-operatives were by now known and had been tested by the experience of other countries. The figures quoted above on the growth of Russian co-operative associations between 1902 and 1915 demonstrate how strong was the public demand for a social mechanism to protect the consumer and small producer within the market economy, and the extent to which the country had, from this point of view, become ripe for the development of co-operation.

Russian social thought had been powerfully influenced by the idea of co-operation. An enormous number of books, pamphlets and articles in newspapers and journals had been published which actively propagated the ideas of co-operation and described the organization and functioning of the most varied kinds of co-operative associations, together with their economic and social achievements in Britain, Germany, France and other countries. Among the relevant publica-

tions of that time, there was hardly a book or article to be found which did not refer to the ideas of Robert Owen as 'the spiritual father of co-operation', or mention the principles of 'the Rochdale society', or the creator of peasant co-operatives F. Raifeizen, the followers of Fourier, the Fabians or other founders of the co-operative movement in the West.

Amidst the torrent of propagandist literature, as well as the descriptive or educational literature, serious works of scientific analysis began to appear relating to the organization of co-operation in Russia and to the theory of co-operation. Among these, a special place undoubtedly belongs to the books by S. N. Prokopovich and M. I. Tugan-Baranovskii, two well-known Russian economists of the beginning of the century. A book by the first-named author appeared in 1913 and provided an analytical picture of the initial stages of development of all forms of co-operative in Russia; and contained at the same time a detailed critique of how they were interpreted by contemporaries. The combination of a serious analysis of actual social and economic processes with a sharply polemical manner of exposition was in general characteristic of S. N. Prokopovich's works; and was also apparent in his book on the theory and practice of the co-operative movement in Russia.

The very definition of co-operation of Prokopovich contained a polemical edge – directed against the collectivist illusions which still survived among the first Russian co-operative activists. For Prokopovich, any co-operative association represented a free and self-managing alliance of members enjoying full and equal rights. It 'does not swallow up the individuality' of its members, but, on the contrary, 'offers full scope for their individual tastes and gifts', 'performing economic operations' relating to production exchange and credit 'on behalf of the members as a whole', but on condition that net income is distributed 'in proportion to the extent to which each member participates in the common work' (and not in proportion to the share capital). It existed for the purpose of increasing the productivity, and income from the work, of its members, for the purpose of lightening the burden and reducing the costs of their 'production and of the management of their households', which would in the long run make it possible 'to free them from the exploitation of the middleman, the shopkeeper and the money-lender and also make large-scale capitalist production unnecessary'.[3]

According to this definition, co-operation was not a universal form of alliance. Prokopovich makes this quite clear: 'The only people who can participate in co-operative organizations are those with some economic asset', 'only the economically prosperous elements'.[4]

Those who were not economically better off remained outside the ambit of co-operatives. The various types of partnerships of peasants, artisans and workers were regarded as remnants of outdated epochs and formations.[5] The modern co-operative system, according to Prokopovich, functioned solely under the conditions of the market economy and in accordance with its laws.

Whilst noting the 'dependence of co-operative forms on economic relationships', Prokopovich came to the conclusion that 'co-operation cannot serve as a weapon in the struggle against the advance of capitalism'.[6] Only 'for its own members' did it become an 'instrument of self-defence against the exploitation of capital' – by raising the productivity of, and income from, labour and by ensuring the 'inexpensive acquisition' of necessary products. It was specifically within these limits that co-operatives would wage a struggle 'against the exploitation of working people by the *representatives* of financial, commodity and productive capital', by turning it from 'the owner of the enterprise into a hired factor of production'.[7]

This conceptual model was completed by an interesting theoretical argument which was formulated in Marxist language: 'On the basis of one and the same mode of production it is possible for totally different social ways of life to develop'.[8] The question therefore was of the formation of a 'co-operative way of life' within the framework of a capitalist economy. And apart from the argument as to who would ultimately be 'hired' by whom as a factor of production, this version of co-operative development was realistic. It was precisely this form which was, by and large, implemented in modern countries, where a capitalist economy includes a significant co-operative sector.

It was within the framework of market co-operation that Prokopovich also set out to solve the problems of agricultural co-operation. Life experience (such as the development of 'steam-powered transport', the growth of taxes, the penetration of market relationships into the countryside and so on) had already confronted the peasants with the task of 'restructuring their economy on new principles', the essence of which lay in the transition 'from the old type of natural economy designed to satisfy the needs of the peasant family to a new, money economy working for the market and making use of the services of the market'.[9] But the market inevitably meant 'the appearance of the trader and middleman' as an extremely egoistic intermediary between the peasant and the market. It was precisely this which necessitated a 'combination of the peasants' in co-operatives which would pursue 'both agricultural and broader economic goals'.[10]

A concrete examination of the development and functioning of different forms of agricultural co-operation – in relation to marketing,

supply, reprocessing and, in particular, butter manufacture and credit – enabled Prokopovich to make some extremely pertinent observations concerning the process of the implementation of co-operation in the countryside. He demonstrated first of all that 'the natural character of our peasant economy' and 'the inadequate development of money relationships' within it, represented 'the main obstacle in our country to the development of agricultural co-operation' as a whole. Secondly and for that reason, the process of implementing co-operation involved 'only certain branches of the peasant economy' and this was itself reflected in the regional specialization of co-operative work.[11]

It is important to note that the difficulties of the co-operative movement in Russia could not be ascribed solely to objective conditions connected with the level of economic development. S. N. Prokopovich pointed very specifically to the administrative and legal barriers (above all to the fact that co-operatives required official sanction). 'The bureaucratic regime which is dominant in our country', so he wrote, 'is extremely antagonistic towards the principles of collective self-determination, of which co-operation is one particular form'.[12] His book ends with the assertion that the first precondition for the development of Russian society has become 'the winning of certain political rights – including the right of all citizens to combine freely in co-operatives and engage in autonomous activity' [13]

The second of the authors referred to was M. I. Tugan-Baranovskii. A 'legal Marxist' and socialist who belonged to no political party, he devoted a major book, *The Social Foundations of Co-operation* (*Sotsial'nye osnovy kooperatsii*, 1916) to the general theory of the co-operative movement and to a generalized account of the development of all its forms and tendencies, not only in Russia but also in other countries. This book had been preceded by an earlier one – *Towards a Better Future* (*K luchshemu budushchemu*, 1912) – which was a first attempt to present such a theory. What we are therefore presented with is not a set of piecemeal arguments on a routine topic, but the fruit of serious study carried out over many years. It is important to emphasize this because the book might almost have been specially written for the Revolution; it contained what was virtually a premonition of the agonizing search for the path to a new society, and of the ruinous mistakes and irreparable losses which accompanied this search. We shall see below how, in the country where this book was written and published, it was only towards the end of the 1980s that 'socialism' was able to grasp what N. I. Bukharin (and, of course, not he alone) had begun to grasp in the 1920s; and yet it was something, so it now turns out, which had already been said in 1916 – on the eve of the Revolution.

Co-operation, according to Tugan-Baranovskii, was a new form of economic organization which had arisen 'as a result of the conscious efforts of broad social groups to transform the existing [i.e. capitalist – V.D.] economic system in a certain direction'. This 'direction' was that of 'the socialist ideal'.[14] Its implementation, even under capitalist conditions, had led people to combine in co-operatives – in economic enterprises whose practical activity differed in no way from that of capitalist enterprises, since they were pursuing 'the private economic advantage of their members' and were doing so 'through the medium of exchange'. A co-operative 'emerges fully equipped with capitalist technology, it stands on capitalist ground and this is what distinguishes it in principle from socialist communes which sought to create an economic organization on an entirely new economic basis'.[15]

Socialist communes which were set up in the nineteenth century in various countries, were opposed to capitalism by virtue of their very design, and required the initial existence of 'a new Man' or 'of people of exceptional moral qualities'. This in itself limited their influence and ultimately doomed them to failure. Tugan-Baranovskii considered it beyond dispute that although 'such communes are fully capable of surviving by their own efforts under favourable conditions' nevertheless their economies 'not only fail to provide their participants with the enormous advantages of which their sponsors had dreamt but are, as a general rule, worth scarcely more than an economy run by a single individual'.[16] A co-operative, on the other hand, must 'trust an individual as he is and must take the social environment as it is'. It 'builds something new . . out of the raw material provided by contemporary society'[17] This novelty is reflected above all in a cardinal change in the 'social-economic nature' of the economic enterprise.

Tugan-Baranovskii perceived the 'non-capitalist nature' of a co-operative enterprise in the fact that it 'never pursues the goal of earning a capitalist profit' although it does make a payment for the (share and loan) capital which it attracts. In a *consumer association* payment was made 'at the lowest possible rate of interest per share whilst the total net proceeds are distributed between those who collect the goods, the consumers'. However these proceeds 'do not in general constitute income in the economic sense. They represent only that part of the expenditure which has been saved by the members.' Likewise, in the case of a marketing association, the income was distributed 'not in proportion to the share capital' (except in the sense that the lowest possible interest rates were paid on the capital), but in accordance with the quantity of products which were 'made available for marketing' and which had been produced by the

association's own labour. Lastly, in the case of a *producers' partnership* – 'the whole purpose' consisted in the attempt 'to eliminate the capitalist owner by handing everything over to the workers themselves whilst the surplus product which, in the hands of the enterpreneur represented profit, will, by virtue of remaining in the hands of the workers who created the product, become earned income'.[18] Thanks to all this, the co-operative became a form of 'self-defence by the labouring classes against encroachment by the hirers of labour'.[19]

Up to this point, Tugan-Baranovskii's analysis of co-operation did not basically differ from that of Prokopovich. One may suppose that the possibility, as co-operation developed, of the emergence of a multi-layered economy based on the capitalist mode of production was something which Tugan-Baranovskii did not rule out – at least as a particular stage in the historical process. But he did not stop at that. In his view, co-operation represented not only a means of self-defence for the labouring population, but a breakthrough into a future socialist society.

Already before the Revolution, the 'legal' (as opposed to the 'actual') Marxists had grasped something which others would take a very long time to grasp: a socialist economy will inevitably continue to be based on commodity-money relations, since at this stage of historical development it is only the means of production which are socialized, whilst articles of consumption pass 'into private ownership so as to avoid encroaching on private life, which presupposes the right to choose what one consumes' and this is just the same 'as in the case of present-day commodity production'.[20] This is all the more important in view of the inevitability of the continuance of hired labour, since 'even in a socialist state the workers would not be the owners of the goods which they produce as well as of the means of production' and would have to be paid 'a definite wage for their labour' just as happens in the case of co-operative enterprises.[21]

Consumer co-operation, at least insofar as it involved the proletariat, constituted a ready-made part of the socialist economy; and if it extended to the entire population of the country and to the management of the national economy as a whole, it would represent nothing other than a system of collectivism, that is of socialism. Proletarian consumer co-operation, so Tugan-Baranovskii maintained, would tend towards the complete transformation of the existing social structure and towards the creation of a new economy based on 'the subordination of the entire economic system to the interests of social consumption'; it would 'gravitate towards collectivism'.[22] He understood however that the power of the co-operatives themselves was inadequate, and that they represented

only a part of the workers' movement – existing side by side with trade union organizations and political parties.

The socialist potential of the co-operative movement was, according to Tugan-Baranovskii, confined solely to workers' consumer co-operatives. Not only did he deny that there was any socialist potential in petty bourgeois co-operatives (consisting of officials, for example) whose functions were confined to no more than those of adaptation to market conditions. He also denied any socialist potential in peasant or agricultural co-operatives. Their purpose was solely to defend the interests of 'the small peasant farmer' – the interests of 'his self-preservation', since capitalist conditions constituted a threat to 'the entire economic existence of the peasant as an independent farmer'.[23]

Co-operatives, so Tugan-Baranovskii believed, did a great deal to defend and improve the peasant economy and even did a great deal 'for its profound transformation'. However, this transformation was confined to the organization and expansion of market relations, the surmounting of the prevalent isolation of the small-scale peasant household and its involvement 'within a powerful web of social ties'. He recognised that 'the new type of peasant economy which is being created by co-operation' was becoming 'socially regulated'; it was being given 'the opportunity to make use of the gains and advantages of a large-scale economy' and 'to compete against large-scale capitalist enterprises'.[24] But nevertheless, the idea of transforming the peasant economy itself and of organizing its output on socialist principles was categorically rejected. This was partly connected with the fact that in all countries, agricultural co-operation embraced 'mainly the middle and rich peasants. The least well-off peasants, who are close to the proletariat, are economically too weak to participate in co-operatives in significant numbers.'[25] This, as Tugan-Baranovskii rightly observed, may explain the conservative, often plainly reactionary political attitudes of agricultural co-operatives in Germany, Belgium and France at that time.[26] But the main thing, so he maintained, was that co-operatives defended and strengthened the position of the peasant precisely as a small-scale individual producer, and did not create any collective economy. Let us take, for example, the following argument:

> The peasant household, even when drawn into co-operative organizations, continues to be a small-scale entity in the sense that the co-operative fabric – no matter how many ramifications it may develop and no matter how stable or complex it may become – is still based on the individual peasant household headed by an independent peasant farmer who manages the

> farm at his own risk and peril. Not only does co-operation represent no threat to the independence of the peasant household: it makes the peasant household more secure by making it more successful and by improving its technical standards. One must therefore reject, in the most categorical fashion, any idea that co-operation leads to the concentration of the peasant economy or thereby prepares the ground for socialism[27]

Only in a producers' partnership did the possibility exist for 'the complete absorption of individual agricultural production by social production', but neither in agriculture nor indeed in industry, as Tugan-Baranovskii noted, was this 'in practice' widespread at the time of the book's publication.[28]

It is strange to read such a defense of what came to be called collectivization in the writing of a 'legal' Marxist who inclined to a position which was reformist and not in the least revolutionary. The dogmatic interpretation of the organization and functioning of especially large-scale advanced production solely in the image and likeness of factory or machine-powered production, based on the collective labour of large groups of workers, was at that time almost universal – as was the simple equation of socialism with collectivism. We should emphasize, however, that Tugan-Baranovskii's theoretical models were in no sense practical recommendations. On the contrary, when we study them we find the following clarification:

> contemporary socialism in no sense requires the destruction of peasant ownership or the replacement of the labour of the peasant on his field by the tilling of the land by large social groups. Most representatives of contemporary socialism recognise that even within the framework of a socialist state, the peasant household may be preserved, owing to the substantially different conditions of production in agriculture and in industry. By not making demands for the destruction of peasant ownership, socialists may also appear as defenders of peasant co-operation which undoubtedly supports the peasant economy.[29]

One begins to understand why Tugan-Baranovskii, although he denied that there was any socialist potential in peasant co-operation, was nevertheless able, as a socialist, to advocate its further development. Co-operation as a whole was 'a creative, constructive force'; it contained 'a spirit which draws mankind onto new paths and which creates new social forms'. Moreover it was already 'building a

new society within the framework of the one which now exists'.[30] Such were the general ideas of Tugan-Baranovskii's book. In a country which was becoming ripe for social revolution, his general theory of co-operation, permeated as it was with optimism, was actually perceived as a scientific validation for the co-operative development of Russian society.

* * *

The subsequent progress of co-operative theory in Russia is linked with the name of Alexander Chayanov. A scholar, writer and active public figure, Chayanov perished during Stalin's repressions and has only recently been rediscovered: first in the West (in the 1960s) and subsequently in his native Russia (though only at the end of the 1980s). Chayanov's book *The Theory of Peasant Economy* (*Teoriya krest'yanskoi ekonomiki*) appeared in an English translation in two editions – in 1966 and 1986–7. The introductory articles to the book which were written by D. Thorner, B. Kerbley, R. Smith and T. Shanin provide a good picture of the author's career and contribution to learning.[31] These articles have concentrated mainly on the theory of the peasant economy, which was the main object of Chayanov's concern and of his thinking as a scholar and public figure. The present book represented his basic work on peasant co-operation – which not only makes it possible to modernize, and therefore rejuvenate and rescue the peasant economy of family farmers, and enhance the well-being and culture of the countryside, but which also makes it possible to restructure the life of society as a whole, including rural society, advancing social justice and general prosperity.

The publication of works devoted to the modernizing of agriculture marked the beginning of Chayanov's life as a scholar. As a 20-year-old student of the Moscow Agricultural Institute (now called the Timiryazev Agricultural Academy), Chayanov at the end of his second year of study in 1908 spent his vacation in Italy and then, in 1909, in Belgium. In both cases his vacations were taken up with studying the work of co-operatives in the countryside and the agronomical services which they provided. The choice of these subjects was not in itself out of the ordinary: they were at that time the 'sore spots' of Russian society. Moreover, his teachers had included the eminent expert on agronomy, D. N. Pryanishnikov and the well-known economist A. F. Fortunatov, who had themselves made extensive studies of both agronomy and rural co-operation. Fortunatov had been the author of one of the first courses on co-operation for students in Russia.[32] Pryanishnikov in 1904 had visited

Italy and had drawn attention to the important role of agronomical services in the development of its agricultural co-operatives.

There was nothing fortuitous nor was there anything new in studying the experience of other countries which had achieved significant successes in agriculture by means of an efficient agronomical service and of a widely developed system of co-operatives. The beginning of the century in Russia had been marked by quite a number of such studies. By way of example we should mention the writings, which became well-known, of Professor A. N. Antsyferov – the author of *Co-operation in the agriculture of Germany and France* (*Kooperatsiya v sel'skom khozyaistve Germanii i Frantsii*), which was published in 1907; this author also delivered a series of lectures at the Shanyavskii University on 'The present state of credit co-operatives in the countries of Western Europe', which was published in 1913.

Chayanov's student writings proved to be quite out of the ordinary. This was recognized at the time, as is shown by the fact that they were published at once in the mainstream press of that day. The central All-Russian journal *Vestnik sel'skogo khozyaistva* ('The Agricultural Gazette') had, already in 1908 printed in two of its issues Chayanov's article on the work of agronomists in the Italian countryside. In 1909, his 'Letters from the Belgian countryside' appeared in 6 issues of this journal; and in 1910, spread over 15 issues was his analysis of Belgian data concerning agricultural credit, 'public measures' relating to cattle-rearing and the insurance of cattle. In 1909 a pamphlet by Chayanov followed under the title *Co-operation in Italian Agriculture* (*Kooperatsiya v sel'skom khozyaistve Italii*). Of course these letters and essays devoted a great deal of space to descriptive material on matters of special relevance for practical work in Russian agriculture. However, they were written in a lively and persuasive way and involved a quest for those aspects of advanced experience in other countries which could be adopted and utilized in Russian agriculture in order to help solve its own problems, above all for the improvement and advancement of the small-scale peasant economy. It was precisely this emphasis on the social aspects of research, and the highlighting of general questions concerning the importance of co-operation, organization and agronomy which constituted the distinctive characteristics of Chayanov's early writings. They had outlined a range of problems which would ever afterwards remain crucial in his scientific activity.

In his pamphlet on peasant co-operation in Italy he had focused attention on elucidating the role of co-operation in the general and rapid advance of agriculture which could be seen in that country at the end of the last century and the beginning of the present one.

Here he came across genuine evidence of the capacity of co-operatives not only to defend the peasant against the offensive from private capital, particularly the money-lender and the middleman, but also of its capacity to create an economic mechanism to underpin the adaptation of the peasant economy to market conditions, thus promoting a general advancement. Italy's growing agricultural production. so Chayanov maintained, 'was not artificially contrived in isolation from the popular masses . but was, on the contrary, engendered from the depths of the national economy. Since it marked a real economic renaissance of the entire nation, it contributed powerfully to the enhancement of the well-being of the popular masses.'.[33]

What seemed to Chayanov to be particularly valuable in Italian experience was the direct link between the work of credit co-operatives and that of publicly organized facilities with regard to agronomy. This, in the first place, guaranteed the rational and efficient organization of credit facilities for peasant households (in Russia this problem was still unsolved). Secondly, this system made it possible to carry the financing of agriculture beyond the stage of partial, often piecemeal, improvements and to proceed to the stage of influencing regional and national production as a whole. In this way, new conditions were created for the growth of co-operatives and for the enhancement of their role. Direct comparisons between those cases where a credit system was established and those cases where it was not (as in Russia) – provided extremely eloquent testimony in favour of co-operation.[34]

In the case of Belgium, too, Chayanov was particularly interested in the interaction between co-operatives, publicly organized agronomical facilities and state policy, in the process of the radical 'marketization' of agriculture, and in the sharpening conflict between large-scale and small-scale forms of production in which the peasantry found itself under attack. It was while he was studying Belgian co-operatives and peasant households that Chayanov arrived at a new interpretation of both. This interpretation was prompted by the high level of efficiency, organization and rationality in the structure of the peasant co-operative system which made the component elements and connections in this system transparent. The conclusion Chayanov formulated for the first time stated that the analysis of the internal structure of the peasant economy 'reveals to us a number of distinct technical processes in agriculture which are, through the deliberate activity of "economic man" integrated into an "economy" Each one of these processes is so self-contained that it can be detached in a technical sense wihout disturbing the general organizational plan of the economy'.[35]

This conclusion very soon developed into a formulation of the main theme of Chayanov's research: the theory of the peasant economy. It was precisely here, in his essays on Belgium, that one can discern the starting-point of his explanation of the importance of peasant co-operation which he described as 'the possibility – without making any special changes in the economic equilibrium and without substantially destroying the organizational plan of the small-scale rural economy – of organizing some of its particular technical economic activities where large-scale production enjoys an undoubted advantage; organizing these activities up to the level of large-scale production by technically detaching them and merging them with similar activities being undertaken by neighbours, into a co-operative'.[36] The words just quoted were constantly to recur in his writings right up to the end. The idea which they expressed was developed and added to, it was to be reinforced by fresh arguments and fresh investigations and meanings; and it was to develop into a general theory of peasant co-operation which was most fully expounded in the present book.

The young author of the 1909 articles understood that if peasant households were to be brought within the co-operative system, conditions of commodity production were essential. 'Such a merger' so he observed ' . does not take place until processes are introduced of a kind which can be merged; and it is particularly important to remember this in Russia' (where the involvement of peasant households in commodity relations was only just beginning). But once these conditions existed, then in his view, the process of bringing peasant households into the co-operative system became a matter of objective necessity. The circumstances in Belgium (the crisis of small-scale farming and so on) 'compelled small-scale farms to organize certain aspects of their organizational plans along co-operative lines – by dint of the same historical necessity whereby the development of machinery had led to large-scale capitalist production in industry'.[37] This comparison of the importance of the extension of co-operatives with that of industrialization does, of course, contain an element of exaggeration. At that time, however, there had been no development of non co-operative methods of introducing elements of large-scale production and distribution into farms of the peasant type.

A key had been found to the solution of one of the main problems of the social-economic development of Russia – the problem of the peasants' road into modern society. However, it would require years of further analytical work and – what was particularly important – of practical work in the Russian co-operative movement, before the understanding of the organizational structure of co-operatives could evolve into a theory of co-operative development for the peasant economy and into a programme of practical action.

Already at the stage when Chayanov was becoming established as a scholar and public figure (and it is in this way that the pre-revolutionary years of his career can be defined), he was showing a characteristic desire and ability to connect science with life and to turn knowledge into practice. He rapidly became an active figure in the co-operative movement in Russia, and was one of the organizers and leaders of the Central Association of Flax-Producers' Co-operatives (*L'notsentr*, which was set up in 1915). It was natural that his research and teaching activity should have combined an analysis of practical questions (his publications of those years included articles on the co-operative marketing of agricultural products, the co-operative study of markets, the work of agronomists in co-operatives, the teaching to peasants of co-operative book-keeping, the setting up of co-operative associations and so on) with an analysis of questions of a conceptual nature, involving, in particular, the introduction of a general teaching course on co-operation, based on lectures delivered at different places.

A. V. Chayanov's *Short Course on Co-operation* (*Kratkii kurs kooperatsii*) was published in 1915 and enjoyed great popularity. In the years 1919–1925 the book was to be re-issued in three further editions. (Several further editions were to appear after his rehabilitation in 1987.) In its treatment of the general questions of co-operation, this course comes close to the conceptions of M. I. Tugan-Baranovskii; but in its interpretation of peasant co-operation it differs very substantially from those conceptions and even contradicts them; since it regards the peasant household as the basis of a future agrarian system – perfected both in its productive and in its social aspects; and it regards co-operation as the path to the creation of such a system and as a form of its existence.

The formation of Chayanov's theory of the co-operative development of the peasant economy, and of the political programme connected with it, was decisively influenced by the Russian Revolution of 1917 which opened up opportunities for a choice in the path of social development and which provided experience of social and economic transformations. From the very first days of the Revolution, Chayanov was an active participant who fought for the implementation of profound democratic and social reforms, including radical transformations in agriculture. In April 1917 he was one of the founders of the League for Agrarian Reforms, whose aim was to bring about a discussion of the agrarian question and ways of solving it. As a member of the Central Managing Committee of the League, he took part in drawing up a document whose purpose was 'to define the parameters within which a discussion of the agrarian problem should take place. We are of the opinion (1) that the self-

employed co-operative peasant farm should form the foundation of the agrarian system in Russia; and that our country's land should be handed over to it; (2) that this transfer should take place on the basis of a state plan for land organization, drawn up with due regard for the special features of the life and economy of different regions and implemented in a planned and organized way without damaging the productive effort of our national economy; (3) that land organization is only a part of the solution to the agrarian problem, which involves all matters connected with the general conditions of agricultural production, the organization of self-employed peasant farms and the organization of links between these farms and the world economy as a whole'.[38]

Apart from A. V. Chayanov, the members of the Managing Committee of the League included some of the most eminent agrarian specialists of that time, who, moreover, represented different political tendencies (N. P. Makarov, P. P. Maslov, S. L. Maslov, N. P. Oganovskii and others). The platform presented in their joint names was evidence of the fact that the idea of agrarian reform orientated towards a co-operative peasant economy had become widespread and had gained wide support from public opinion in the country. The validation of this idea was the subject of Chayanov's brilliantly written pamphlet *What is the Agrarian Question?* (*Chto takoye agrarnyi vopros?*) (It was printed as the first in a series of publications by the League on basic questions of agrarian reform). The textual similarities between Chayanov's pamphlet and the three points of the platform quoted above indicate that they were written by the same hand. These two documents taken together do indeed represent a political programme for the solution of the agricultural question in Russia, drawn up by Chayanov and supported by the League for Agrarian Reforms.

The starting point for Chayanov's programme included the most revolutionary demands of 1917, and above all the demand which had become the slogan of all democratic forces: 'The land – to the working people!' 'In accordance with this demand', so the pamphlet explained, 'all land now forming part of the farms of large landed estates must be handed over to self-employed peasant farms'.[39] This 'transfer of privately owned land to the peasantry' could be carried out in the form of socialization, in the sense of the abolition of any ownership of land ('it belongs equally to everybody, like the light and the air'); or in the form of nationalization, that is, the transfer of the land into the ownership and control of the state; or in a form involving a decisive role for local self-management in the control of the land, and involving the use of a 'single tax on land' in order to collect a ground rent for the benefit of the people (following the idea

of Henry George); or finally, through the creation of a 'system of state regulation of land ownership' with a ban on the right to buy and sell land.[40]

None of these alternative solutions to the problem was totally excluded: the choice was eventually to be made by the Revolution. However, Chayanov himself sought to find the best solution to the complex problem of 'implementing the socialization of the land and its transfer to the self-employed peasant farms with the minimum difficulties and the minimum costs'. He was inclined to favour a combination of the last two alternatives – a system of state regulation of land ownership and a system of progressive land taxes with the additional right 'to expropriate any land', since he believed that this would make it entirely possible 'automatically within one or two decades to achieve nationalization or municipalization'.[41]

The socialization of land ownership and its transfer to the peasantry were only the starting point of an agrarian reform whose aim was infinitely broader and more important, namely to create 'a new agrarian structure and a new kind of land ownership'.[42] The purpose of the reform was to ensure 'the development of productive forces' and the creation of 'new production relations' of a kind which would meet two basic criteria (or, what amounted to the same thing, two principles of a particular conception of organization and production), namely (1) *the maximum productivity of the labour invested by the people in the land*; and (2) *the democratization of the distribution of the national income*.[43]

When assessing, in the light of these criteria, the *'conceivable* systems of production relations', Chayanov rejected not only capitalism but also 'state socialism' and 'anarchistic communism' although it seemed to him at that time that they might be regarded as 'theoretical organizational forms' of the principle of the democratization of distribution. However the task, in his opinion, consisted in 'bringing both organizational principles into harmony with one another'.[44] Only co-operation was capable of achieving this and therefore the future agrarian system must be based on co-operatives.

The case for a co-operative future now began to rest not only on the possibility of protecting the small-scale peasant household under conditions of market competition, but also on the economic and social merits of co-operation in comparison with those of a large-scale capitalist economy. Chayanov saw the real advantages of the latter in market specialization and in the use of complex machinery and of the achievements of science ('the availability of agronomists', 'improved cattle' and so on). Relying on the yardsticks used at that time, Chayanov considered, first, that 'the very nature of an agricultural

enterprise places limits on the enlargement of its scale' and therefore, that 'the advantages of a large-scale over a small-scale economy in agriculture could never be very great in quantitative terms'. Secondly, practical experience led him to the conclusion that co-operation had the capacity 'to impart all these advantages of a large-scale economy to small-scale peasant households'. Moreover 'small-scale peasant households, when joined in co-operative associations, achieve a scale and potential which is actually greater than those of the very largest private farms'.[45]

This comparison between small-scale and large-scale farms was not confined to the sphere of production. Chayanov was led by the logic of his thinking to an analysis of social differences: 'We have to compare, not large-scale and small-scale farms, but a farm which is operated by its owner and by the manpower of the owner's family, on the one hand; and, on the other hand, a capitalist farm which is operated by hired labour'.[46] For Chayanov, this description in itself contained the proof of the advantages of the peasant household, advantages which were to be revealed to their full extent under the conditions of a co-operative system. In those conditions the path was opened to the constant intensification of labour, the growth of production and social wealth combined with a guarantee of democratization in the distribution of the national income.

In 1917, as a 'non-party socialist' who was also the author of a socialist and radical programme of agrarian reform, Chayanov rapidly won political authority. He became a member of the Main Land Committee, which had the task of politically supervising the preparation and later implementation of land reforms; he became a member of the Council of the Russian Republic which exercised supreme state power pending the convening of the Constituent Assembly; and finally, he was appointed assistant to the Minister of Agriculture in the last Provisional Government.[47] There is every reason to suppose that agrarian reform in conditions of further democratic development would have borrowed many of the ideas set out in Chayanov's programme. However the pursuit of such an agrarian reform proved impossible owing to the narrow mindedness of the ruling classes, the weakness of democratic institutions which had not yet been fully formed, and the shortsightedness and political blindness of the people who led these institutions.

In the Russia of 1917–9 a peasant revolution had broken out which had destroyed ownership by landlords as well as private land ownership in general. It had taken the form of the direct seizure and redistribution of land; and had no connection whatever with co-operatives or with any other formerly defined programme. The wave of this revolution led to the success of the Bolshevik workers'

revolution, which placed the Communist Party headed by Lenin in power; they, in turn, embarked on revolutionary socialist transformations implemented by dictatorial methods. A political dictatorship of the working class was established which very soon degenerated into the dictatorship of the Communist Party and later, by the end of the 1920s, degenerated into Stalin's bureaucratic dictatorship. But, in the years 1917, 1918 and 1919, a popular revolution was in progress which was deciding the fate of the country.

A. V. Chayanov belonged to the stratum of the Russian intelligentsia which, despite its extremely complex, contradictory and mainly negative attitude towards the October Revolution of 1917, very soon began to work within Soviet institutions or within co-operative organizations which were collaborating with Soviet power; and did so with obvious and increasing benefit to the Soviet Republic. Here we can quote the testimony of Chayanov himself. At the beginning of 1930 when he was being subjected to sharply intensifying persecution, he managed to publish in the *Sel'skokhozyaistvennaya gazeta* ('Agricultural gazette') an article entitled 'On the fate of the neo-*narodniki*' which was written with astonishing sincerity, almost as if he had already anticipated his own fate. This is what he then wrote about his attitude to the October Revolution: 'In general *I entirely agree with the view once expressed by Jaurès that a revolution can be either completely rejected or equally completely accepted, just as it is.* I have been guided by this view throughout all the years since our revolution took place, Therefore the question of my attitude to the October Revolution was decided not at the present time, but on that day in January 1918 when the Revolution discarded the idea of the Constituent Assembly and followed the path of the proletarian dictatorship. Ever since February 1918, my life has been bound up with the revolutionary reconstruction of our country; and, as I carefully recall, day by day, the years which have passed, I believe that no one has, or can have, any grounds for refusing to describe me as a Soviet worker, without any inverted commas'.[48]

The complexity of Chayonov's relations with the Bolshevik leadership lay in the fact that whilst he joined in the common endeavour, he maintained his independent views and openly criticized everything in Bolshevik policy which he considered to be incorrect, mistaken, harmful or simply unnecessary from the point of view of socialist policy or from the point of view of the tasks and opportunities of the period of transition to socialism. Chayanov's standpoint was openly and precisely formulated in his review of Nikolai Bukharin's book *The Economics of the Transitional Period* (*Ekonomika perekhodnogo perioda*, 1920). The gist of Chayanov's

observations was that many of the phenomena of disintegration in our national economy do not spring endemically from the transitional period [as they were portrayed in this book – V.D.] but are the inevitable result of measures which have not been thought through, which are unnecessary or not obligatory '.[49] This was precisely the standpoint of Chayanov which has emerged from recently published documents of co-operative conferences and congresses in 1919 and in the following years.[50]

Chayanov's main pronouncement during the period of the Bolshevik Revolution and civil war was his book entitled *The Basic ideas and organizational forms of peasant co-operation* (*Osnovnye idei i formy organizatsii krest'yanskoi kooperatsii*) which appeared in 1919 and was an early version of the book now published in a shortened form in English translation. The writing and publication of the monograph was the result, above all, of a decade of research work which made it possible to provide a concrete picture of the organization and functioning of all forms of agricultural co-operation and of all the main branches of its work – and thus to provide an extended validation for the concept of the co-operative peasant economy on the basis of enriched and reinforced arguments. There was something else which was no less important: the book represented a direct answer to the questions raised by the course of the Russian Revolution. It is well-known that from the autumn of 1918, priority was being given in Soviet agrarian policy to the creation of collective and Soviet (i.e. state) farms. This first experiment in collectivization did not, and could not, lead to serious results. On the contrary, it provoked widespread opposition among the peasantry and, in the spring of 1919, the goal of collectivization was dropped for the purpose of practical politics, although it was retained in socialist policy programmes as a long-term perspective which remained constant, (although requiring the creation of the objective preconditions, strict adherence to the principle of voluntary membership and so on). The collective farm movement, which mainly included some revolutionary elements of the landless strata in the countryside, enjoyed total support from the state. All the greater therefore was the urgency of a critical analysis of the nature of the experiment in collectivization which had taken place. The book, which appeared in that same year, 1919, directly in the train of events, decisively rejected 'the communization of production' in agriculture as well as 'the co-operative socialization of the entire peasant economy'; and pointed out such genuinely difficult problems as 'labour incentives', 'the organization of labour' and 'the managerial will', that is, the issues of management.[51] The experience of subsequent Soviet history has made us very familiar with the

difficulty of solving all these problems. However the idea of collective agriculture (based on *artel'*, that is partnerships) was in no way totally discarded: it became an integral part of the general concept of the co-operative development of the countryside.

A specific familiarity with the organizational-productive structure of the peasant economy and of the possibility of separating it into parts and of splitting off certain productive and organizational functions, made it possible, as A. V. Chayanov showed ' to split off and organize in the form of large-scale co-operative enterprises, those sectors where such an enlargement of scale would produce a noticeable positive effect . without disturbing those aspects of the economy where small-scale family production was technically more convenient than large-scale production'. In the end, the opportunity was created for organizing all levels of activity, all functions and types of work, etc., 'on the particular scale and on the social foundations which are most appropriate for them'. Thus, side by side with the peasant household, a 'large-scale collective enterprise of the co-operative type' was arising.[52] In 1919 it was commonplace to emphasize the subordinate role of co-operation in relation to the peasant economy. This was reflected in the following definition: 'Peasant co-operation . is a part of the peasant economy which has been split off for the purpose of being organized on large-scale principles'.[53] Co-operation would exist for as long as the peasant economy existed; and it was this which predetermined 'the limits of co-operative collectivization'.[54]

Only a few people were able to understand the originality and depth of the idea of 'co-operative collectivization', particularly in the conditions of 1919–1920. But there is no doubt that the idea of 'co-operative collectivization' found endorsement in Lenin's article 'On co-operation', of 1923, particularly in the article's conclusion that for the Russian peasants the growth of co-operation was in itself identical with the growth of socialism. It is known that Chayanov's book was one of the seven books on the theory and practice of co-operation which Lenin consulted when he dictated the article on his death bed.[55]

The second edition of the book on peasant co-operation was extensively revised and supplemented – as stated on its title-page. The preface to the book, was dated 1 December 1926 – which indicates that the changes and additions were not prompted by political expediency, nor were they due to coercion nor in general were they dictated by extraneous factors (which was to become commonplace in publications on public affairs from the beginning of 1928). The New Economic Policy, orientated towards the socialist development of the countryside through co-operation, as well as the

practical experience of co-operation itself in the 1920s, had provided a genuinely new, rich and important factual material for verification, clarification, the perfecting of the system and from a conceptual point of view. The theoretical discussions which took place in the 1920s on economic and social problems provided a great deal of food for thought.

What was entirely new in comparison with the first edition of the book was an analysis in depth of the problem of the 'horizontal' and 'vertical' types of concentration of production, of their potential and of the interrelationship between them. The importance of this theoretical analysis has been confirmed by the experience of agricultural development in different countries. Either there is a powerful upsurge of production, accompanied by social progress, along the path of 'vertical' concentration, that is, along the path of growing diversity and interaction between different forms and scales of the organization of production processes and economic ties, both of the co-operative and the non-co-operative varieties. Or by contrast, production will stagnate and there will be social stalemate, if the path of 'horizontal' concentration is followed – assuming, of course, that this is not accompanied by something much worse (i.e. brutal coercion as happened under Stalin's collectivization). From the point of view of socialist development, 'vertical' integration in its co-operative form was obviously to be preferred. The book indicated how, in the long term, the establishment of a co-operative system of agricultural production means that ' the entire system undergoes a qualitative transformation from a system of peasant households where co-operation covers certain branches of their economy into a system based on a public co-operative rural economy, built on the foundation of the socialization of capital which leaves the implementation of certain processes to the private households of its members, who perform the work more or less as a technical assignment.'[56]

'Horizontal' concentration in the form of collective farms was in no way rejected out of hand. Collective farms, set up by peasants of their own free will – on their own initiative and in their own interests – could and should be part of the co-operative system in accordance with general co-operative principles. 'The choice' so Chayanov wrote 'would not be between *collectives* and *co-operatives*. The essence of the choice would be whether the membership of co-operatives is to be drawn from collectives or from peasant family households'.[57] He did not exclude the possibility (although he did not think it the most desirable) of a 'concentration' of production embracing the whole of agriculture, in which 'literally all peasant households were ultimately merged into communes and were organized on optimum areas of 300 to 500 hectares' [741 to 1235 acres]. But it was emphasized that this

should 'in no way affect our basic system of co-operatives engaged in purchasing, credit, marketing and production, which would continue to be organized as before. The only difference would be that the membership of primary co-operatives, instead of being drawn from small peasant households, would be drawn from communes'.[58]

'Co-operative collectivization', so A. V. Chayanov believed, represented the best, and perhaps the only possible way of introducing into the peasant economy 'elements of a large-scale economy, of industrialization and of state planning'.[59] What he saw as its merit was that it was implemented on an entirely voluntary and economic basis which amounted to 'self-collectivization'.

The idea of 'co-operative collectivization' reflected the basic tendency of the actual development of co-operation in the Russian countryside in the 1920s, and offered a real alternative to collectivization of the Stalinist variety. This was quite enough to ensure that the book would very soon be condemned and banned; and that its author would be among the first victims of Stalinist repression.

NOTES

1. See S. N. Prokopovich, *Kooperativnoye dvizhenie v Rossii, ego teoriya i praktika, (The Co-operative Movement in Russia, its Theory and Practice)*, Moscow 1913, A. V. Merkulov, *Istoricheskii ocherk potrebitel'skoi kooperatsii v Rossii (A Historical Outline of Consumer Co-operation in Russia)*, Petrograd, 1915.
2. V. I. Lenin, *Complete Works*, 5th Russian edition, Vol. 37, pp. 230–231, 232 et al.
3. Prokopovich, *supra*, pp. 16–17.
4. Ibid., pp. 10, 11.
5. Ibid., pp. 21–29.
6. Ibid., p. 29.
7. Ibid., pp. 15, 30. My italics – V.D.
8. Ibid., p. 30. The idea of the possibility of forming and developing different social structures on the basis of one and the same mode of production was a new idea which ran counter to prevailing Marxist assumptions of the day. It is gaining scientific currency in our own time.
9. Ibid., pp. 114, 115.
10. Ibid.
11. Ibid., p. 121, 153 et al.
12. Ibid., p. 444.
13. Ibid., p. 453.
14. M. I. Tugan-Baranovskii, *Sotsial'nye osnovy kooperatsii (The Social Foundations of Co-operation)*, Berlin, 1921, p. 4. We have made use of the copy of the book which exists in the library of Cambridge University (Great Britain).

15. Ibid., pp. 68, 71.
16. Ibid., pp. 67, 78.
17. Ibid., p. 67.
18. Ibid., pp. 76–77, 29, 87.
19. Ibid.
20. Ibid., pp. 7, 9.
21. Ibid., Ibid., p. 74.
22. Ibid., pp. 498–499.
23. Ibid., pp. 346, 351.
24. Ibid., pp. 361, 368–369.
25. Ibid., p. 349.
26. Ibid., pp. 349–360.
27. Ibid., p. 363. Cf. pp. 499–501.
28. Ibid., p. 366.
29. Ibid., pp. 367–368.
30. Ibid., pp. 96, 105 et al.
31. See: A. V. Chayanov, *The Theory of Peasant Economy, Ed. by D. Thorner – Homewood, 1966; A. V. Chayanov on the Theory of Peasant Economy*. Edited and introduced by D. Thorner, B. Kerbley and R. E. F. Smith. Second edition, with an additional foreword by T. Shanin. Madison, Wisconsin, 1986; Manchester 1987.
32. See A. F. Fortunatov, *Ob izuchenii kooperatsii. Kursy po kooperatsii*, (*On the Study of Co-operation. Courses on Co-operation*), Vol. III. Shanyavskii University Publishing House, Moscow, 1913.
33. A. V. Chayanov, *Kooperatsiya v sel'skom khozyaistve Italii*, (*Co-operation in the Agriculture of Italy*), Moscow, 1909, p. 4.
34. Ibid., pp. 6–7.
35. A. V. Chayanov, 'Letters on Belgian Agriculture', *Vestnik sel'skogo khozyaistva*, 1909, No. 36, pp. 8–9.
36. Ibid.
37. Ibid.
38. See the 'Preface' on behalf of the Managing Committee of the League of Agrarian Reform to its publications. (For example, A. V. Chayanov, *Chto takoye agrarnyi vopros?* ('What is the Agrarian Question?'), Moscow, 1917, p. 4; *Osnovnye idei resheniya agrarnogo voprosa* ('Basic Ideas for Solving the Agrarian Question'), Moscow, 1918, pp. 3–4 et al.
39. A. V. Chayanov, *Chto takoye agrarnyi vorpos?*, supra, p. 20.
40. Ibid., pp. 32–33, 41–45.
41. Ibid., pp. 55, 58–59.
42. Ibid., p. 38.
43. Ibid., pp. 16, 18.
44. Ibid., pp. 18–19.
45. Ibid., pp. 24, 25.
46. Ibid., p. 26.
47. The following is the description of A. V. Chayanov, which appeared on the list of candidates nominated to the Constituent Assembly by the national organization of the co-operative movement of Russia:
'*Chayanov, Aleksandr Vasil'yevich*. Member of the Council of the

Russian Republic, representing co-operatives. Member of the All-Russian council of co-operative congresses. Teacher at the Petrov-Razumovskii Agricultural Academy. Member of the Main Committee on Land issues. Assistant to the Minister of Agriculture. Co-operative movement activist. Member of the Council of the Central Association of Flax Producers in Moscow. An economist. Well-known for his writings on the land question, the peasant economy and co-operation. In politics – a non-party socialist'. (*Golos naroda*, organ of the co-operative alliances and associations, 12 (25) November, 1917). It should be noted that Chayanov could not take up his duties in the Ministry of Agriculture.

48. *Sel'skokhozyaistvennaya gazeta*, 29 January 1930.
49. Quoted from N. Bukharin and G. Pyatakov 'The Cavalry Charge and the Heavy Artillery (A light-hearted response to the critics of 'The Economies of the Transitional Period)'. *Krasnaya nov'* Literary-artistic and scientific, social-political journal. 1921, No. 1, p. 272. The reply tendered apologies to Chayanov for the use of his unpublished manuscript (p. 256). The manuscript has unfortunately not been found.
50. See, *Kooperativno-kolkhoznoye stroitel'stvo v SSSR. 1917–1922. Dokumenty i materialy. (The Building of Co-operatives and Collective Farms in the USSR. 1917–1922. Documents and Material)*. Editor-in-chief, V. P. Danilov, Moscow 1990, pp. 133, 159, 162, 177, 180, 181, 278, 281, 301, 302, 304–306 et al.
51. A. V. Chayanov, *Osnovnye idei i formy organizatsii krest'yanskoi kooperatsii (The Basic Ideas and Organizational Forms of Peasant Co-operation)*, Moscow, 1919, pp. 42, 301, 303–305.
52. Ibid., pp. 15–16.
53. Ibid., p. 21.
54. Ibid., p. 301.
55. See V. I. Lenin, *Complete Works* 5th Russian edition, Vol. 45, pp. 376, 597–598.
56. A. V. Chayanov, *Osnovnye idei i formy organizatsii sel'skokhozyaistvennoi kooperatsii* (The Basic Ideas and Organizational Forms of Agricultural Co-operation), 2nd ed, further revised and supplemented, Moscow, 1927, p. 13. See p. 11, this book.
57. Ibid., p. 345 [Russian]; this book, p. 205.
58. Ibid., pp. 341–342 [Russian]; this book, p. 204–5.
59. Ibid., p. 24 [Russian]; this book, p. 21.

Author's Comment

This inquiry is based on the personal experience of the author – who has worked for some twenty years in the ranks of the Russian co-operative movement – and on his observation of the co-operative movements in Italy, Belgium, Germany, Switzerland and France. It is also based on the work of a seminar on questions of agricultural co-operation which has been running for many years and which has been led by the author since 1913 at the Timiryazev (formerly the Petrov) Agricultural Academy.

The book includes substantial revisions of its first edition, which have been undertaken so as to keep pace with developments in co-operative theory. It also includes, among other things, material originally presented in a report to the co-operative section of the congresses of the Supreme Council of the National Economy (VSNKh) in 1919.

The author has deliberately narrowed the scope of his inquiry to an analysis of the basic ideas of agricultural co-operation and to an investigation of its basic organizational forms. We have not attempted to describe fully the present state of agricultural co-operation, still less have we attempted to outline its history, since we had neither enough material nor enough time for such an ambitious inquiry.

Yet even within the limited scope of our subject, we are still far from having gained a complete or final grasp of the material because the focus of our study – the peasant co-operative movement – is developing so rapidly in its scope and depth that theoretical ideas have lagged behind its practical achievements. Hence the many defects of this book and, perhaps, the element of haste in its

conclusions, which seek, ahead of time, to provide a logical framework for the new forms of a spontaneous movement which are now being historically envisaged.

Colleagues who read the page-proofs of this book drew my attention to the not entirely clear way in which I had used the terms 'state capitalism' and 'capital' in relation to the peasant household. I therefore think it necessary to make it clear in the preface that:

1. In relation to the peasant household, which has no variable capital, I have used the term 'capital' in its most general sense; and it does not, of course, have the historical connotation associated with the capital within capitalist production.
2. In exactly the same way, I have used the term 'state capitalism' in the sense in which it was understood in our country in 1923: that is, as a synonym for a planned economy, based on state enterprises employing hired labour. No special social or political connotation is implied in this term.

The Author

Petrovsko-Razumovskoye
1 December 1926

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The Processes and the Concept of Vertical Concentration in the Rural Economy: Peasant Co-operation as an Alternative

It is highly likely that a great many of the readers of this book – agronomists, engineers, teachers and those who work in the rural community – have more than once despaired when faced with the obstacles that the life of a modern Russian village has placed in the way of what they are doing.

It must be realized, of course, that there are good reasons for this. No one will deny that the basic idea underlying the organization of the contemporary economy is the idea of large-scale organizational measures, involving many thousands of workers, tens of millions of roubles of capital, gigantic technical constructions and the mass production of standardized goods. The Ford machine-building factories, the *Volkhovstroi* and the other gigantic hydroelectric plants, the ocean-going transport lines, which are serviced by high-powered transatlantic enterprises, banking concerns that concentrate milliards of roubles of capital into a powerful economic fist – these are the economic facts which dominate and fascinate the minds of those who manage the economy at the present time.

It is no wonder, therefore, that many of our comrades, especially our younger comrades, whose minds are still full of images of the goals and achievements of the present-day industrial economy, and who are impatient to achieve something similar in their own provinces, are often reduced to utter despondency after a few months' work. They come close to desperation as they get jolted in a peasant cart on a rainy November evening along impassable roads from somewhere like Znamensk via Buzayevo to somewhere like Uspensk. Everywhere they encounter a lack of roads as well as the poverty and indifference of peasants installed on small, overlapping

agricultural allotments, and who, with an excessive 'purely petty-bourgeois stupidity', are turned inwards on their tiny holdings.

We are sympathetic to the desperation of such a comrade who has visions of being in a Ford workshop although in reality his work obliges him to deal with two people farming five acres of ploughed land with one cow and often without a horse.

However, while understanding the subjective desperation of the beginner, we are in an objective sense totally disinclined to accept his depressing conclusions.

It is still quite obvious, of course, that the economic life of the peasant countries – China, India, the Soviet Union and many other countries of Eastern Europe and Asia – does not provide us with the sort of visible and obvious achievements of new organizational forms which we can easily see in the industrial countries of the West.

However, any economic phenomenon should always be examined from the point of view of the way it evolves, and it should, so far as possible, be examined in depth. If such an approach is adopted towards the agriculture of peasant countries, it then turns out, greatly to the surprise of many people, that agriculture is not only not hopelessly unsuited to the application of wide-ranging organizational policies, but that it is precisely here, in our present epoch, that intensive changes are occurring. These changes are making it into a subject whose organizational scope is of no less importance than the large-scale innovations in industry. It would therefore be useful in the highest degree for our despondent reader to understand that it is precisely in those outlying areas that the greatest potential exists for the goals and achievements of the future.

The point is that, so far, these changes are only at their very first stage of development and that they cannot and do not obviously provide us yet with anything like a complete picture which can be made the subject of a photograph.

The whole purpose of this book is to show the paths along which our countryside is developing and the forms in which it is being organized. As a result, there occurs a barely perceptible, but in reality a most radical, restructuring of the countryside's organizational foundations. The countryside, which only ten or twenty years ago presented an anarchical picture of diffuse, minute, semi-cultivated households, is now on its way to becoming the object of the most wide-ranging structural innovations and the base for large-scale economic activities.

If, on the basis of the evidence, we study the historical course of the development of urban industry and banking, we can easily see that their modern forms of organization, whose power and scale so impress us, have certainly not always existed. They are the result of

gradual and in fact fairly recent development. In the not so distant past, some 150 years ago, the textile and even the metal-working industries were organized in the form of small-scale craft enterprises, often run as family concerns. And it was only capitalism, as it developed and grew stronger, which caused the disintegration of the patriarchal forms of the organization of production on the basis of crafts; and which, after first gaining control over the trade turnover, created the first large enterprises in the form of textile mills, subsequently multiplied them in the form of modern factories and plants and, in the final phase of its development, consolidated them into trusts and syndicates of various kinds.

There is no need for us to describe this process in detail: it will be known to our readers from any textbook of political economy.[1] For the purpose of the present book, the one important thing about this process of capitalist development is that in the sphere of agriculture this process was retarded; and that in many places its evolution assumed somewhat different forms.

There is, of course, no doubt that in agriculture, as well as in industry, large-scale forms of economic organization yielded considerable advantages and lowered production costs. In agriculture, however, these advantages were not as apparent as in industry.

The reason for this lay in the technical conditions of agricultural production. Indeed, the main form of concentrating and enlarging the scale of production in industry was that of so-called *horizontal concentration*, i.e. a form of concentration under which a multitude of very small and geographically scattered enterprises were merged, not only in the economic but in the technical sense, into one gigantic whole which concentrated enormous reserves of manpower and mechanical power into a small space and thereby achieved a colossal drop in the production costs. But in agriculture the achievement of such a degree of horizontal concentration was unthinkable.

What is meant by agriculture is basically the utilization by humans of the solar energy that reaches the earth's surface. The solar rays that radiate on to 100 acres of land cannot be focused onto 1 acre of land. They can be absorbed by the chlorophyl of the crops sown only over the entire radiated area. Agriculture is, by its very nature, inseparably connected with a large area; and the greater the scale of an agricultural enterprise from the technical point of view, the larger the area that it has to occupy. In that sense, no concentration in space can possibly be achieved.

Let me quote a small example. A factory owner who possesses a 100-horsepower engine and who wants to increase his output tenfold can install a 1,000-horsepower engine and thereby considerably reduce his working costs. But let us suppose that a farmer who tills

his strip of land with one horse wants to achieve a tenfold increase in his sowings. He naturally cannot acquire a horse that is ten times larger: he has to acquire ten horses of as good a quality as the first horse. There will be some reduction of costs through a substitution of tractor power for horse power. But the farmer who already has one tractor and who increases his sowings tenfold cannot increase the power of the tractor: he has to acquire ten similar machines to work simultaneously in different areas, as a result of which working costs will be reduced to a considerable extent. The same can be said with respect to other kinds of stock – seed, manure, cattle, and so forth.

A farmer, when he increases his production, is in most cases obliged to increase the number of the things that he uses, rather than to increase their scale. Because of this, the economies of scale, expressed in quantitative terms, are smaller. It should furthermore be noted that the very nature of agricultural production imposes a natural limit on the enlargement of an agricultural enterprise.

Granted, then, that agriculture is inevitably diffused in space, it follows that a farmer has to move an enormous number of objects around within this space. Horses and animals have to be moved around; so also do machines, manure and finished products.

The larger the household, the greater the land area it works. Therefore, the greater will be the quantity of the products and the greater the distances over which they will be transported; and therefore there will be a constant increase in the costs of transport within the household, both in relation to its economic activity as a whole and per unit of finished product.

The more intensively the economy develops, the more deeply and thoroughly the land will be ploughed up and the greater will be the use of manure. Therefore, the more frequent will be the expeditions from the farmstead into the fields and the greater will be the burden of these journeys to and fro on the costs of production.

With the grain economy based on extensive farming operating in the Orenburg or Samara provinces, the proprietor needs to make only two expeditions: to sow the crops and to gather them in. But as soon as he begins to undertake an autumn ploughing for the sake of spring crops and to cart manure onto the fields, the number of expeditions increases many times over, as we can observe in our central agricultural provinces. Any further resort to intensive methods – the replacement of cereals by beet, turnips or potatoes – will increase the number of journeys to such an extent that every additional increase in the distance between the fields and the farmstead will make itself felt.

The entire benefit derived from the enlargement of the scale of

production may be swallowed up by a rise in the cost of transport within the household, and the more intensive the household becomes, the more rapidly will this swallowing up occur. In Orenburg and Samara, our peasant households often extend over areas of 2–3,000 *desyatiny* [5,400 to 8,100 acres] run from one farmstead. In the Voronezh province, after the transition to three-field systems, the size of the optimal unit of exploitation fell to 800 *desyatiny* [2,160 acres]. In the Poltava province such an enlargement would already have been impossible. In the Kiev province and in Western Europe the costs of transport within the household will still further reduce the area of the household, bringing them to optimal levels of 200 to 250 *desyatiny* [540 to 675 acres].

It not infrequently happened that in earlier times, when households began to be managed by more intensive methods, large-scale owners were obliged to split up their estates into a number of separate farmsteads. Although they were large landowners, they were small or medium-scale land cultivators.

Thus the very nature of an agricultural enterprise imposes limits on its enlargement; and therefore, in quantitative terms, the advantages of a large household over a small one in agriculture can never be very great.

So, despite the fact that even in agriculture large-scale forms of production had an undoubted advantage over small-scale forms, we must nevertheless recognize that in *quantitative* terms these advantages were by no means as significant as in manufacturing industry.

Owing to the fact that, from a quantitative point of view, the advantages of a large-scale economy were less than in the case of industry, the peasant households could not be so simply or decisively crushed by the large latifundia, as their counterparts, the family craftsmen, were crushed by the factories. Furthermore, the peasant households demonstrated an exceptional capacity for resistance and tenacity of life. While often starving in the difficult years, working to their utmost capacity, sometimes recruiting hired labour and thus themselves assuming a semi-capitalist nature, they held firm almost everywhere and in some places even extended their land-holding at the expense of large-scale capitalist agriculture. The wave of post-war agrarian revolutions which swept through Eastern Europe and even gripped Mexico strengthened their position still further.

However, the fact that the peasant economy demonstrated such a great capacity for survival in the universal economic struggle for existence did not in itself in any way mean that it was to remain untouched by the general capitalist development of the world economy. Capitalism, owing to the technical conditions which we

have described, was unable to organize agriculture according to the principles of horizontal concentration and invariably looked for other ways of gaining control over the anarchy of agriculture and of organizing it according to capitalist principles. Instead of the not very well-suited forms of horizontal concentration, the gaining of control took the form of *vertical concentration.*

In actual fact, the most recent research into the development of capitalism in agriculture indicates that the involvement of agriculture in the general system of capitalism is in no way bound to take the form of the creation of very large farming enterprises organized on capitalist lines and operating on the basis of hired labour. Repeating the stages of the development of industrial capitalism, agriculture, having emerged from forms of semi-natural existence, was subordinated to commercial capitalism. This in its turn – sometimes by means of very large commercial enterprises – drew into its sphere of influence large numbers of scattered peasant households. By gaining control over the links between these small commodity producers and the market, commercial capitalism subordinated them to its economic influence; and, by developing a system of credit on conditions amounting to slavery, turned the organization of agricultural production into what was a special kind of exploitative distribution system based on squeezing the workers dry. In this connection one should recall those types of capitalist exploitation which the Moscow cotton firm 'Knopa' used in relation to cotton-growers: buying up their harvest in the spring; handing out advances for food; and granting credit in the form of seeds and tools of production. Such a commercial firm, being interested in the standardization of the commodity which it was buying up, would quite often also start to interfere in the organization of production itself, imposing its own technical standards, handing out seed and manure, laying down what the crop rotation was to be, and turning its clients into technical executors of its schemes and of its economic plan. A characteristic example of this kind of arrangement in our country was the planting of beet in peasant fields under contracts with sugar factories or contractors.

Having gained control over outlets to the market and having created for itself the base for raw material, rural capitalism begins to penetrate the production process itself, splitting certain sectors of activity away from the peasant household's activities, mainly in the sphere of the primary reprocessing of agricultural raw material as well as sectors connected with mechanical processes. The entrepreneurial, steam-powered threshing machines, which travelled round southern Russia offering services for hire, the small butter factories in Siberia at the end of the nineteenth century, the

flax-processing workshops in Flanders and in some parts of our own flax-cultivating provinces – all these are vivid examples.

If, in relation to the most developed capitalist countries such as those in North America, for example, we add to all this the extensive development of mortgage credit, the financing of working capital for households and the commanding power of capital invested in transport, elevators, irrigation and other enterprises, then we begin to see new ways by which capitalism penetrates agriculture. It turns the farmer into a source of manpower working with means of production belonging to others; and it turns agriculture, despite its apparent diffusion and the autonomy of its small commodity producers, into an economic system controlled on capitalist principles by a number of very large enterprises, which in turn are under the control of the highest forms of finance capitalism. It is no accident that, according to the calculations of Professor N. Makarov, out of the revenue from farming realized on the wholesale commodity exchanges in America, only 35 per cent goes to the farmers, while the remaining 65 per cent is absorbed by capital involved in railways, elevators, irrigation, finance and commerce.

In relation to this vertical capitalist concentration, the transformation of households from an area of 10 hectares [24.7 acres] to areas of 100 to 500 hectares [247 to 1235 acres], and the parallel transformation of a significant number of farmers from a semi-proletarian to an obviously proletarian position, would seem like a minor phenomenon. And if this phenomenon is absent, the evident reason is that capitalist exploitation brings a higher dividend precisely through vertical rather than horizontal concentration. In this way, moreover, it transfers a significant part of the entrepreneurial risk from the owner to the farmer.

The form of concentration of agricultural production just described is characteristic of almost all young agricultural countries which are engaged in the mass production of products of one type intended for remote, mainly export, markets.

Sometimes, as a result of the situation that has arisen in the national economy, this vertical concentration assumes forms which are not capitalist but co-operative or mixed. In this case, control over the system of enterprises involved in commerce, the handling of elevators, land improvement, credit and the reprocessing of raw material, which concentrate and manage the process of agricultural production, belongs wholly or in part not to the owners of capital but to small-scale commodity producers. They have organized themselves and have invested their private funds in enterprises or have succeeded in establishing social capital for that purpose.

The appearance and development of co-operative elements in the

process of the vertical concentration of agriculture becomes possible only at certain stages of the process itself; these co-operative elements can appear only when local capital is relatively weak. Here, we deliberately emphasize the word 'relative', since this relative weakness of local capitalist entrepreneurs can result not only from their own weakness in absolute terms but can also result either from the prosperity of the peasant household itself (as in Denmark) or from the fact that co-operative elements may be backed by the financial resources of the state or by the resources of large-scale foreign capital or industrial capital which needs unadulterated raw material.

A vivid example of this process is the development of butter manufacture co-operatives in Siberia. At the end of the nineteenth century, after the building of the great Siberian railway, there arose in western Siberia as the result of the abundance of land suitable for fodder, a situation that was extremely favourable to the development of butter manufacturing for export. In the area of Kurgan, Ishim and other districts, small-scale entrepreneurs began to appear one after another. They soon covered the area with small factories producing butter, thus beginning in a capitalist form the process of the vertical concentration of agriculture in western Siberia.

Siberian butter manufacture, which had been created by small company promoters, in the course of decades turned an originally favourable market into one that was unprofitable. It came up against an acute crisis owing to the very large number of established factories and their ferocious competition, both for milk supplies and in the selling of their butter. Surviving thanks not so much to the revenue from butter as to the profits derived from the shops and payments in goods for the milk, these factories eked out a wretched existence for a number of years and then began, one after another, to close down. For the peasant households which had already re-organized themselves into market-oriented dairy farms, these closures entailed the threat of heavy losses. Not wishing to go back to a natural economy, they were faced with the question of whether to take over the factories which were closing down and run them according to the principles of a traditional peasant partnership (*artel'*).

The co-operative factories which eventually arose in this way were distinguished by the superior quality of their product over the adulterated butter produced by private entrepreneurs; and their development therefore received financial backing from the commercial capital of Danish and English export firms, which had their Siberian offices in Kurgan and in other cities. They rapidly squeezed the private entrepreneur out of the sphere of butter production.

In this way, the concentration of Siberian butter manufacture, which was begun by small-scale industrial capital, was continued with the support of large-scale commercial capital in co-operative forms. 'The Siberian alliance of butter manufacturing co-operatives' made an entry onto the London market and, by relying on bank credit, it totally rid itself of the influence of local commercial capital.

In several different forms, but in accordance with the same dynamics, and also after forming various kinds of connections at different times with capitalist groups, there also developed other kinds of agricultural co-operation.

What has just been said is more than enough for the purpose of understanding the substance of agricultural co-operation as a particular form of the thoroughgoing process of the vertical concentration of agriculture. It must, however, be noted that in the case of co-operative forms this process takes place at a much deeper level than in the case of capitalist forms, since in the case of co-operative forms of concentration, it is the peasant himself who hands over sectors of his economy which capitalism does not succeed in forcibly wresting from peasant households. Such is our understanding of the vertical concentration of agricultural production in the conditions of capitalist society – a concentration which extends both to purely capitalist and also to co-operative forms.

When looking through the statistics of co-operation we see that at the present time co-operative forms of vertical concentration of agriculture have reached an extremely impressive scale. Present-day agricultural co-operative organizations in our country number within their ranks millions of households, and their turnovers have long since been reckoned in hundreds of millions of roubles.

It is precisely this process of the extension of co-operatives to our countryside that we would like to draw to the attention of our despairing worker in the countryside – as the initial phase of the journey which alone can bring the agriculture of peasant countries to a complete and decisive re-organization on the basis of the most large-scale organizational measures.

The now observable forms in which this process manifests itself are modest and not very obvious. What, indeed, can be remarkable about the fact that a peasant woman, after milking her cow, washes her can and uses it to take milk to a dairy association in a neighbouring village? Or in the fact that a peasant who cultivates flax takes his fibre not to the bazaar but to a co-operative reception centre? But in fact, this peasant woman with her minutely small can of milk is linked to two million similar peasant women and peasants and forms part of the co-operative system of butter centres, which constitutes the largest dairy firm in the world and is already

perceptibly re-organizing the entire structure of peasant households in the dairy farming regions. And the small flax cultivator, who already possesses sufficient staying-power as a co-operative member, represents one particle in the co-operative system of flax centres, which is one of the most important factors constituting the world market in flax.

This is happening at the very first stages of our movement. Its future prospects are incomparably vaster. However, when adopting a programme for the vertical concentration of agriculture in co-operative forms, we have to envisage that this process will last for a considerable time. Like the consecutive phases of capitalist development, from its initial forms of elementary commercial capitalism to the present-day factory, and system of trusts embracing the whole of industry – the vertical concentration which is developing in co-operative forms in our agriculture must inexorably pass through a number of consecutive phases of historical development.

Beginning as a rule with the combination of small-scale producers for the procurement of agricultural means of production, co-operatives very soon turn to the organization of the co-operative marketing of agricultural products which they develop in the form of gigantic alliances combining hundreds of thousands of small-scale producers. As the intermediary operations of this type acquire the necessary scope and stability, they form the basis for a smoothly functioning and powerful co-operative apparatus and, what is particularly important, there occurs, in a manner analogous to the development of capitalism, an initial accumulation of co-operative capital. During this phase of their development, agricultural co-operatives, under the pressure of market forces and as a matter of historical necessity, evolve into organizations with their own operations for marketing and for the primary reprocessing of agricultural raw materials (involving co-operatives for butter manufacture, potato grinding, canning, the dressing of flax, and so on); they remove the relevant sectors of activity from the peasant households; and, by industrializing the villages, they gain control of the commanding positions in the rural economy. Under our conditions, thanks to the assistance of the state and to the granting of state credits, these processes are being accelerated and may occur simultaneously and become interwoven one with another.

Having extended the co-operative system to marketing and technical reprocessing, agricultural co-operatives thereby bring about a concentration and organization of agricultural production in new and higher forms, obliging the small-scale producer to alter the organizational plan of his household in conformity with the policy of co-operative marketing and reprocessing, to improve his technology

and to adopt more perfect methods of land cultivation and cattle-rearing, which ensure uniform standards for the product.

However, having achieved this, co-operatives inevitably build on this success with the aim of even more widely embracing the productive sectors of the peasant economy (by creating machinery users' associations, assembly points, associations concerned with the inspection and with the pedigree of cattle, with joint processing, land improvement, and so on); and part of the expenses involved in these kinds of co-operative production are covered, and must as a matter of principle be covered, out of the profits derived from marketing, procurement and credits.

Given the parallel development of electrification, of technical installations of all kinds, of the system of warehouse and public premises, of the network of improved roads and of co-operative credit – the elements of the social economy grow in quantitative terms to such an extent that the entire system undergoes a qualitative transformation from a system of peasant households where co-operation covers certain branches of their economy – into a system based on a public co-operative rural economy, built on the foundation of the socialization of capital which leaves the implementation of certain processes to the private households of its members, who perform the work more or less as a technical assignment.

Having carefully reflected on the enormous importance for agriculture of the process just described of vertical integration in its co-operative forms, we can maintain with conviction that from the point of view of the national economy the appearance of agricultural co-operatives is of no less importance than was the appearance of industrial capital a century earlier. We must note, however, that neither the importance of agricultural co-operatives nor, in general, the nature of the rural co-operative movement at the present time, have in any sense been adequately understood until now, even by their own creators and participants. This, incidentally, is quite understandable, since it is true of nearly all economic movements that theory comes considerably later than practice.

Capitalism, which is more than a century old, was in effect brought within the ambit of research only at the end of the last century and many of its most complex problems have not up till now been fully studied. Agricultural co-operatives represent such a young and as yet unformed movement that we have no right even to expect them to be the subject of comprehensive theoretical analysis. With few exceptions, all that we have for the moment is a co-operative ideology rather than a co-operative theory. Nevertheless, it is absolutely essential for us to ascertain in as much detail as possible the organizational forms within which, and the economic apparatus by

means of which, agricultural co-operatives are carrying out and can carry out the colossal national economic functions which we have just described; under what conditions and under the pressure of what factors co-operative organizations come into being and are able to exist; and what incentives there are which set their energy in motion.

Without having a finalized or broadly perceived general theory of co-operatives, and making it our purpose to elucidate the nature of the new and gradually developing national economic system which is growing up on the basis of the vertical concentration of peasant households, we need first of all to ascertain what we mean by the concept of 'co-operation', i.e. the subject of study in this book. It means that we have to establish what the organizational and economic qualities are which we ascribe to the co-operative system discussed, and by what criteria we differentiate it from related formations of other kinds. In view of the widespread use in our everyday life of the word 'co-operation', this task might seem to be one of elementary simplicity. However, this is very far from being the case; and it should, perhaps, be recognized that this concept is among the most nebulous and unclear that we use.

It is commonly supposed – and this greatly obfuscates the real state of affairs – that our agricultural co-operative system is merely one variety of the general co-operative movement which also includes the system of consumer co-operatives in the towns as well as all kinds of co-operative associations of artisans and craftsmen. Their economic nature is deemed to be identical and, both in our country (in the *Mezhkoopsovet*, the inter-co-operative council) and in the International Co-operative Alliance, they are merged, even from an organizational point of view, into a single whole.

Despite this, or perhaps precisely because of it, we have not up till now produced any generally accepted formula which defines the general concept of 'co-operation'. And that remains true despite the repeated and numerous attempts of various authors and despite prolonged arguments over this question. Therefore, when setting out to clarify this term, we have to approach the question with particular caution; and we shall try above all to do so in positive terms by examining how the co-operative members and activists of the co-operative movement themselves define the substance of their organization, and what they consider to be, or not to be, 'co-operative'.

Over the past fifteen years, during which time this author has had occasion to talk to Russian, Belgian, Italian and German co-operative activists, he has heard the most diverse, and sometimes contradictory, views of what attributes represent the substance of the co-operative movement.

Some people maintained that the most important thing about co-operatives was that their membership was voluntary, that they were independent and that their management was democratic. Others attached importance to the methods by which profits were distributed and to the secondary role of capital in co-operative enterprises. A third group attached great importance to the openness of co-operative organizations, and thought accordingly that it would be contrary to co-operative principles to refuse to admit new members. A fourth group laid particular stress on the fact that co-operatives consisted of self-employed workers; and they were opposed not only to the admission of non-workers but also to the employment of hired labour in co-operative enterprises. A fifth group believed that the substance of co-operatives lay not in their organizational forms but in the social goals which they set themselves, i.e. in their struggle on behalf of the have-nots, which was in some cases socialist and in other cases religious in nature. A sixth group drew a distinction between co-operatives and communes on the basis that co-operatives involve only the partial socialization of economic activity and not the fusion of all economic effort into one collective enterprise. And so forth.

When we try to discern the meaning of the attributes just mentioned, and when we try to relate them with one another and with the phenomena of life, we are obliged to note that they are both variegated and contradictory. Many of these attributes are inapplicable to whole classes of co-operatives, whose co-operative nature is intuitively not open to doubt nevertheless.

Thus at the present time, for example, it is extremely hard to find a co-operative which does not employ hired labour. Also, the traditional craft associations (*artels*), as well as many agricultural co-operatives (such as those concerned with land improvement, with machines and with land cultivation), very often consist of exclusive groups which do not admit new members. It is not uncommon to find consumers' associations where membership is obligatory for entire categories of staff. Finally, those who work in co-operatives do not by any means always set themselves social goals, or if they do so, the aims are often sharply contradictory – as we can see, for example, from the religious type of peasant co-operatives in Belgium and in the socialist workers' co-operatives. Therefore, if our overriding purpose is to provide a definitive formula applicable to co-operatives of all kinds, we have to include the common characteristics found in all branches and those that can be regarded as essential.

Proponents of the theory of co-operatives do precisely this – by providing extremely short and abstract formulas. Immediately before

our revolution of 1917, enormous importance was attached to these definitive, general formulas: they became the subject of violent disputes; and in our own literature, dozens of formulations were put forward.

For the sake of exemplification and comparison we will take two of the most vividly expressed and most sharply opposed formulations. Thus, for example, Tugan-Baranovskii defined co-operatives as follows:

> A co-operative is an economic enterprise made up of several voluntarily associated individuals whose aim is not to obtain the maximum profit from the capital outlay but to increase the income derived from the work of its members, or to reduce the latter's expenditure, by means of common economic management. (M. Tugan-Baranovskii, *Sotsial'no-ekonomicheskaya priroda kooperatsii* [The Social and Economic Nature of Co-operation]).

The definition given by K. Pazhitnov sounds entirely different:

> A co-operative is a voluntary association of some individuals which aims, by its joint efforts, to combat the exploitation by capital and to improve the position of its members through the production, exchange and distribution of economic benefits, that is, as producers, consumers or sellers of manpower. (K. Pazhitnov, *Osnovy kooperatsii* [The Foundations of Co-operation]).

All the other formulations repeated or developed those of Tugan-Baranovskii and Pazhitnov, or else tried to combine their ideas into a single formula.

When comparing the defining characteristics quoted above, we can therefore easily divide them into two groups: on the one hand, those of an organizational and formal nature (the role of capital, methods of distributing profits, forms of management, etc.); and on the other hand, those relating to social goals (destruction of the capitalist system, class harmony, liberation of the peasantry from economic bonds, etc.).

The question naturally arises as to whether it is possible to combine these two categories into a single definitive formula. And doubt may even arise as to whether these definitive features are concerned with one and the same phenomenon. Indeed, we are profoundly convinced that the attempt to define co-operatives involves not one but two things which have to be defined. On the one

hand, we have a co-operative enterprise as an organizational-economic entity which may not set itself any social goals whatever; or which may even set itself social goals which run counter to those contained in the formulations enumerated above. On the other hand, we see before our eyes a widespread co-operative movement, or, more exactly, co-operative *movements*, each of which has its own particular ideology and which makes use of co-operative forms for the organization of economic enterprises, as one of the instruments (sometimes the only one), for its concrete embodiment. These latter movements consciously set themselves social goals of various kinds, and would be unthinkable without such goals.

Therefore, in our opinion, the concept of 'co-operatives' has to be broken down into two concepts: a 'co-operative enterprise' and a 'co-operative movement', and defining characteristics need to be formulated for each of them.

A 'co-operative enterprise' can be quite adequately described by a formal definition of the kind given by Tugan-Baranovskii. One can, in any case, find several typical organizational elements (such as the role of capital or the working people's social environment) which make it possible to provide *a single definition* for all co-operatives.

From the formal, organizational-economic point of view, the Belgian co-operative of the religious type – the first paragraph of whose statutes lays down that membership is open only to those who recognize 'the family, property and the Church as the only foundations of society' – and the communist co-operative associations of workers may be totally identical.

But without trying to provide a brief and an all-embracing formula, we might nevertheless deem it to be a characteristic feature of a co-operative enterprise that it can never be a self-centred enterprise having its own interests existing apart from those of the members who set it up. It is an enterprise which serves the interests of its clients who are also its proprietors and who organize its management in such a way that it is directly responsible to them and to them alone.

All the elements of the definition given by Tugan-Baranovskii and those like him logically stem from the idea we have formulated; and it really can be a feature common to all co-operative enterprises. But such a uniformity is hardly possible once we turn to the characteristics of co-operatives as a social movement.

It is true that, at first, when co-operatives represent primarily a movement based on literature and on ideas, such uniformity does exist. But as soon as the co-operative movement penetrates the thick of the national economy and becomes one of its essential foundations, class divisions and other contradictions begin to appear

and the ideological mirage vanishes into thin air. An attentive observer will note the separate workers' co-operatives which regard themselves as a part of the general workers' movement; the burghers' urban co-operatives; the artisan co-operatives; and finally, peasant co-operatives. Each of them, in so far as they have really become part of life and have put down roots, are of the same flesh and blood as those social classes and groups which gave birth to them. And if, within the given group, there arises any kind of consciously conceived social movement of a class nature, then co-operatives are inevitably used as one of the elements of such a movement. Thus, for example, the labour movement has been reflected in three concrete forms: in a workers' party, in a trade union and in workers' co-operatives.

In Western Europe in the peasant milieu something like this can also be observed (in Belgium, Switzerland *et al.*) where alongside agricultural co-operatives, which are sharply differentiated from and hostile to workers' co-operatives, there exist parties which base themselves on the economic interests of the peasantry. Given such a state of affairs, it would be naive in the conditions of a class society to regard all types of co-operative movement as parts of a single, unified whole, and to subsume them under the nebulous general concept of 'the struggle for the interests of the working people'. From the scientific point of view this would mean abandoning depth and detail in social analysis; and from the political point of view it would mean ignoring those sometimes antagonistic class interests which ought to be identified in all their different meanings.

Therefore, from the social point of view, we should always speak not about *the* co-operative movement but about co-operative movements. And we are profoundly convinced that the same distinction should also be drawn in the organizational analysis of co-operative enterprises as such. While acknowledging that it is possible to provide a single definition of a co-operative enterprise, if this is approached from the formal, administrative point of view, we must nevertheless emphasize that because of its generality, it is devoid of specific content and therefore virtually useless.

In particular, in relation to agricultural co-operation, the common definition of the formal-organizational type totally leaves on one side the organizational-economic content which is involved in co-operative work as the result of the process which we have described as the vertical concentration of agriculture which assumes co-operative forms. Yet it is precisely this process of gradual concentration and regeneration of agricultural production which represents the essence of the matter for us, the organizers of the new agriculture. And what is important to us about agricultural producer co-operatives is

precisely those elements which distinguish it from consumer co-operatives, and in no way the formal elements which they have in common. Nor should we forget that the social nature of co-operatives inevitably affects the specific economic tasks of a co-operative enterprise and, therefore, its organizational goals.

The organizational and economic bias of a co-operative enterprise is influenced to an important degree by the role in production or in commodity circulation which is played by its owner-members. What, indeed, can there be in common between a private shop and a similar co-operative shop staffed by the disabled, involving exactly the same commodity and similar technique, and often operating in the same neighbourhood? Of course, from a formal point of view, both economic enterprises are similar. But from the point of view of political economy they are of a nature which is not only different but antagonistic.

There is an even greater difference of organizational tendencies with regard to co-operative warehouses, let us say, for fruit and vegetables, depending on whether they are maintained by co-operatives of consumers or those of producers.

It must never be forgotten that in the conditions of a society which is alien to the planned organization of the state economy and to the state regulation of production and of the market, a co-operative represents an element, organized on collective principles, of an economic activity of a group of individuals; and that its purpose is to serve the interests of this group and of this group alone.

A workers' consumer co-operative represents organized purchasing activity on the part of the proletariat which has no interests apart from the interests of the proletarian class. Craftsmen's associations which handle raw materials have a point and purpose only in so far as they supply craftsmen with material for work. Peasant co-operatives, as we know, constitute a part of the peasant economy which has been given a distinct identity in order to organize that economy on large-scale principles.

In short, then, co-operatives cannot be thought of in isolation from the social and economic foundations on which they are based; and in so far as these foundations are economically diverse, the forms of co-operatives are themselves of diverse kinds.

Co-operatives organize those interests and aspects of the lives of groups or classes which already existed before co-operatives appeared; and at the early stages of the development of capitalist society, co-operatives did not introduce any new element which stands above class relations.

Thus peasant co-operatives in our opinion represent, in a highly perfected form, a variation of the peasant economy which enables

the small-scale commodity producer to detach from his plan of organization those elements of the plan in which a large-scale form of production has undoubted advantages over production on a small scale – and to do so without sacrificing his individuality. He is able to organize them jointly with his neighbours so as to attain this large-scale form of production – while possibly employing hired labour.

Urban consumer co-operatives involve neither such a combination of households nor the rationalization of their productive activity. Their purpose is to co-ordinate the purchasing activities of their members and to organize a more rational expenditure by members of the income which they get from productive activity outside the co-operative.

Partnerships of craftsmen, artisans and traders do not constitute such an association of independent economic units, but usually represent a complete fusion within one enterprise of the working activities of their members; they are, therefore, better described as joint production rather than co-operation.

In order to bring this idea as sharply as possible into relief, we would like to focus the attention of the reader on four specific scenarios.

Scenario A would assume an ordinary butter manufacturing association of peasants in which the process of manufacturing and selling butter has been split off from the households and organized into a co-operative which has built a factory and hired workers to manufacture the butter. The co-operative produces butter from the milk supplied by its members and sells it to consumers. It is in a state of antagonistic relations (in the sense of opposing interests) both with the consumers and with its own workers (who produce the butter).

Let us now suppose that our co-operative is obliged for some reason to go into liquidation and that the workers who produce the butter buy the butter manufacturing factory and organize themselves into a workers' butter-producing partnership, the economic nature of which can be seen in scenario B. Here the co-operative buys the raw material (the milk) from the peasants and, having reprocessed it into butter, sells it to consumers, but comes into an antagonistic relationship both with them and with the peasants. The co-operative is guided by the will of the workers and it is the interests of their labour which it defends – not the labour interests of the peasant nor the interests of the urban consumer.

Let us then suppose that our workers' partnership is itself forced to close down and that the butter manufacturing factory is bought up by a consumers' association which has been formed in the town and which wishes to supply its members with cheap, good quality butter.

Scenario C depicts the pattern of economic relationships in this new case of co-operative organization. The managerial power passes entirely out of the hands of the butter producers and is exercised from outside. The production of butter is organized on principles close to those of capitalism and is in an antagonistic relationship both with the peasants and with the workers.

Scenario D assumes the case where the factory passes into the hands of a private entrepreneur – let us say, one of the foremen who has enriched himself – who then organizes the enterprise solely according to his own will and is in an antagonistic relationship with all the other actors depicted in our scenarios.

Thus our factory has remained intact and has gone on working and has, from a technical point of view, remained just the same during all of the four phases of its existence. Nevertheless, in each of these four cases, different relationships arise between the actors depicted in the scenarios, even though they themselves have remained unchanged; and the economic nature of each of the four permutations differs greatly from that of the others. The interests being defended are also different. A peasant butter manufacturing association aims to sell milk at the highest possible price and to pay as few workers as possible. A workers' partnership (*artel'*) receives a payment for its work which depends on the difference between a cheap purchase and a sale at a higher price. A consumers' society aims to obtain butter at the lowest possible price and therefore, so far as it can, it pushes down the payment for milk and for labour. This is identical to the aim of the capitalist who seeks, besides that, to obtain high selling prices for butter.

Thus it is that different kinds of co-operatives differ both in their nature and in their interests. Those who support the unity of the co-operative movement envisage the merger of the first three types – or at least of the first and third types – into a single enterprise. Is this possible?

The difference between these interests is so great that the very numerous attempts to achieve organizational mergers between different kinds of co-operatives with different class affiliations have usually resulted in failure and have raised questions as to whether an integrated co-operative movement is possible.

In one case, in a province on the middle Volga, an association of co-operatives emerged whose members in the south produced wheat and bought felt boots, while those in the north produced felt boots and bought wheat; and they conceived the idea of making an exchange between the co-operatives for the purpose of mutual advantage. Three years after this arrangement had begun, I had occasion to meet the leaders of the Association and to ask how this

scheme was working out. 'Things are going well,' so I was told. 'We sell our felt boots in Moscow and buy our felt material in Kazan. We drive the wheat from the southern areas to Moscow and we make purchases for the northerners in Vyatka.' 'And what about exchanges between the co-operatives?' The person to whom I was talking merely waved his hand. It was quite clear that it was the actually existing combination which was the most advantageous.

I think that the case just described can to some extent provide an answer to the question whether an integrated co-operative production is possible.

It is possible for peasant and urban co-operatives not to be mutually hostile, to trade on a reciprocal basis and even to become unified at congresses and in organizations based on some common idea or financial principle. However, the interests that they defend are so much in conflict that they cannot be integrated within one single organization, for its will to exist is inevitably undermined by the inner contradictions between conflicting interests.

Such are the general considerations that compel us to acknowledge that agricultural co-operatives represent an economic phenomenon which resembles other types of co-operative only in an outward and formal sense, but whose nature differs from them profoundly and therefore needs to be made the subject of a separate study.

It must be emphasized that everything set out above was discussed from the point of view of the national economy of a capitalist society.

Having outlined our categories, we now come to the central and most important set of questions of the present time:

1. What are the internal changes which will be required in the processes of the vertical concentration of agriculture, particularly in its co-operative forms, when the regime of a capitalist society is replaced by a transitional system of state capitalism and, after that, by a regime of socialist organization of production?
2. Do we, in our present-day organizational work in relation to the peasant economy, need methods of vertical concentration and, if so, in what forms?

It is not very difficult to answer the second of these questions.

Inasmuch as the gaining of organizational control over the processes of agricultural production is possible only by replacing the diffuse peasant economy by forms of concentrated production, we must in every way develop those processes of rural life which lead towards such concentration.

The path of horizontal concentration, with which we usually

associated the notion of large-scale forms of production in agriculture in a country consisting of small peasant households, was thought of, from an historical point of view, in terms of the spontaneous differentiation of peasant households. Among these, the poorest would turn into the proletarian workforce, while the middle peasants would fall away, production becoming concentrated among the prosperous groups who organize it on capitalist principles and recruit hired labour. This process was bound to lead to the gradual creation of large-scale and technically quite well-organized enterprises which, at the time of formation of a socialist economy, could be nationalized and turned into grain and meat factories.

But it can easily be understood that in the context of Soviet rural policy with its Land Code of 1924 and its general regime of land nationalization, this path is totally out of the question. The proletarianization of the peasantry cannot in any circumstances be a part of Soviet policy. During the course of the revolution we were, indeed, not only unable to concentrate scattered areas of land into large-scale production units, but were obliged to break up a considerable part of the old, large-scale estates.[2] It follows from this that the only form of horizontal concentration which can at the present time occur and actually be achieved is the concentration of peasant land-holdings into large-scale production units in the form of agricultural collectives of various kinds, in the form of agricultural communes, partnerships and associations for joint cultivation of the land – since they are, of course, based on peasant land and not on the old estates.

This process, as we shall see below, is occurring on a considerable scale; but it is not taking place, nor can it take place, on the scale needed for an overall policy aimed at the concentration of agricultural production. Therefore, the most important means of achieving concentration of peasant households has to be one of vertical concentration. It must take co-operative forms, since only in these forms will it be organically linked with agricultural production and capable of acquiring the necessary depth. In other words, the only path which is possible under our conditions for introducing into the peasant economy elements of a large-scale economy, of industrialization and of state planning, is the path of *co-operative collectivization*, the gradual and consecutive separation of particular sectors of specialization from individual households and their organization as public enterprise.

When understood in the way just set out, agricultural co-operation becomes practically the only method of bringing our agriculture into the system that exists in the USSR. And this, at the present time, represents our basic task.

Agricultural co-operatives arose in our country long before the revolution of 1917. They existed, and exist, in a number of capitalist countries. However, in our country before the revolution, as well as in all other capitalist countries, they represented nothing more than an adaptation by small-scale commodity producers to the conditions of capitalist society and a weapon in the struggle for existence. They did not represent a new social system, nor could they do so; and in this respect all the dreams of the many ideologues of co-operation were utopian.

But this state of affairs is radically changing, since the system of agricultural co-operation, with its social capital, its high degree of concentration of production and the planned nature of its work, is appearing not in the context of capitalist society but in the conditions of a socialist society or, at least, of the state capitalism which exists in our country. In this case, precisely because of its high degree of vertical concentration and centralized co-operative system, it becomes linked through its centres with the directive agencies of the state economy and – from being a simple weapon created by small-scale commodity producers in their struggle for existence in a capitalist society – it becomes converted into one of the main components of the socialist system of production. In other words, from being a technical implement of a social group or even of a class, it is being converted into one of the foundations of the economic structure of the new society.

This process of the transformation of the inner social and economic content of the co-operative movement, with the replacement of the political domination of capitalism by the power of the working masses, was highlighted in a particularly vivid way by Vladimir Lenin in the articles *About Co-operation*, which he wrote shortly before his death. After noting the importance of co-operation, in the sense explained above, within the system of state capitalism, he foresaw the possibility of the further development of this transitional form and ended his argument by pointing out that 'a system of civilized co-operators, based on public ownership of the means of production and on the victory of the proletariat over the bourgeoisie, is socialism.'

This interpretation of the national economic importance of agricultural co-operation is, in effect, what predetermines the main thrust of our agricultural policy. Given the nationalization of the land and the political domination of the working masses, this economic system, introduced into the system of the planned state economy by means of co-operative alliances and co-operative centres, can be regarded as being identical to the socialist organization of agriculture.

Such was the origin of the new forms of agriculture, built on the

principle of vertical concentration. In its present condition, the co-operative movement in different regions is at different stages of a gradual development. Whereas in some provinces of the USSR we see only the first embryonic signs of buyers' and sellers' co-operatives, places such as the renowned district of Shungen or the districts of Velikiye Soli, Burtsevo and Kurovo in the Moscow province, provide us with many examples of co-operative concentration penetrating into the very core of agricultural production and marketing. By closely following how they developed, we can trace to a certain extent the outlines of the new organizational forms of the agriculture of the future.

NOTES

1. Reference can in any case be made to the excellent new book by V. S. Bernshtein-Kogan, *Vvedenie v ekonomiku promyshlennosti* [Introduction to the Economics of Industry], Moscow, 1926.
2. Editor's note: for contemporary discussion see V. P. Danilov, *Rural Russia under the New Regime*, London, 1987; O. Figes, *Russia's Peasant War*, Oxford, 1989. Also T. Shanin, *The Awkward Class*, Oxford, 1972, Part III; G. T. Robinson, *Rural Russia under the Old Regime*, New York, 1966.

2

The Theory of Differential Optima and Co-operatives in the Peasant Economy

The broad national economic perspectives which we outlined in the last chapter, and the perspectives which we are outlining for the development of agricultural co-operatives, cannot be totally understood or expressed in concrete terms until we become familiar with the peasant household itself, which constitutes the foundation for the building of co-operatives and which is, in its present-day form, the raw material for all measures taken to organize our agriculture.

Despite the fact that over the past fifty years a great deal has been said and written about the peasant household, especially in Russia, we have, properly speaking, only very recently begun gradually to discern, from amid the torrent of general ideas and polemics, certain generally accepted propositions. These have been arrived at by empirical means and repeatedly tested and confirmed, and, as they accumulate, promise to provide us with an objective theory of the peasant household.

We are in any case already in a position to establish a number of propositions, which are at least sufficient to enable us to express our co-operative theory in concrete terms and to establish its social orientation.

The peasant households, taken as a whole as some kind of social stratum, represent a complex phenomenon which is extremely heterogeneous in its make-up. Already by the end of the last century, thanks to the fortunate endeavours of Shlikevich, the statisticians of the *Zemstvo* [regional authorities], when processing statistical material based on the censuses of farmsteads, had begun to use the method of classifying households according to the scales of land used, the area which they had under cultivation and the numbers of their cattle.

It transpired from this system of classification that peasant households varied enormously in size and included those whose area was five to six times greater than that of their neighbours.

Because they were not well versed in studying the organizational foundations of the peasant household, many of the *Zemstvo* statisticians did not pay due attention to the fact that under a communal system of land tenure the land area of households was determined by the number of people, workers and mouths to be fed.[1] Nor did they pay due attention to the fact that precisely this stratification had been revealed by classifications of peasant households described in the censuses of the eighteenth century. They then hastened to identify this stratification of the peasant masses – which at that time had been established only in a *static* form – as a *dynamic* process of horizontal concentration in Russian agriculture. From this point of view, the system of classification according to the area under cultivation revealed the social differentiation between peasant households. It also identified the peasants who sowed on a large scale as constituting the embryo of rural capitalism, and those who sowed on a small scale as the incipient proletarian workforce of the countryside.

This point of view, which seemed extremely plausible from a superficial observation of the countryside, persisted stubbornly and for a long time in economic literature, and it led economic thought on to an unproductive path of research. Only in recent years has it been demonstrated in the writings of N. Chernenkov, G. Baskin, B. Kushchenko and other statisticians that the system of classification according to the area under cultivation cannot, of itself, serve as a tool for revealing the social differentiation of the countryside; and that it largely reflects the demographic process of an increase of families, who obtain for themselves a corresponding increase in land, through communal redistributions or through leasing.

The fact that the system of classification on the basis of area under cultivation was ill-suited for studying the social structure of the countryside was noted also by a number of Marxist economists. Among these we find the sharpest critique in the work of Ya. Yakovlev which was concerned with the grain and fodder balance and was published in the USSR by the Central Statistical Board (TsSU).

The conviction gradually arose, even earlier, that the social structure of the countryside and the processes by which capitalism develops within it have to be studied not through systems of indirect classification on the basis of the area under cultivation, but through the direct study of capitalist relationships in the countryside.

The first to embark on this path was V. Groman who, when dealing with statistical censuses for the Penza province, classified households in relation to the hiring of labour. Similar classifications

were used by N. Makarov when calculating work norms in relation to land tenure. Finally, in the summer of 1925 in order to clarify the nature of these relationships in the contemporary countryside, a number of field studies were undertaken by our Research Institute for Agricultural Economics. The material collected on these field studies enables us to identify six basic social types of peasant household:

1. The classical *kulak* household which may at times conduct its agricultural work without hired labour, but which derives the bulk of its income from the trade turnover, from credit based on usury and, in particular cases, from the hiring out of stock and other implements of production to poor households on conditions amounting to enslavement. Here the sources of capitalist income are either the trading profit or superprofit, or the income from the circulation of capital in enterprises belonging to others.

   The development of households of this type has varied in different regions and in different epochs. In general, such households are few in number; but in terms of their influence they represent a major force in the countryside.

2. Households which do not engage either in usury or in trade but which have to be classified as semi-capitalist because in their agricultural or extra-agricultural work they constantly employ hired labour on a large scale, usually in addition to their own labour, in order to obtain an entrepreneurial income from such employment.

   Households of this type are particularly developed in those regions which have a large number of land-holdings and which specialize in producing commodities for export (such as tobacco, wheat, the produce of market gardens, and so on). In these regions, such households are more numerous than those of the first type, but their social influence is always less and they themselves become the victims of exploitation by the *kulak* households.

3. Households which neither hire labour nor engage in other forms of capitalist exploitation. They run their households through the labour of their large families, they are reasonably well provided with the implements of production and they therefore expand the volume of their economic activity. Sometimes they are not inferior to households of the second type, especially when they use complex machinery and a tractor.

   Households of this type are especially common under the

communal system among the old, complex, undivided, patriarchal families with married sons. They comprise a large proportion of the households among the group which cultivates relatively large units. Such households will sometimes hire labour on a day-to-day basis in order to help the family at a busy period or to mow the hay or cart the manure. Such households are usually exposed to capitalist exploitation only as the result of market relationships, or when some of their members engage in off-farm labour.

4. Households which do not employ hired labour and which do not hire out their own labour to other households, but which, owing to the small size of their families or to the shortage of manpower or of the means of production or of land, are unable to develop into economically robust households of the third type. Households of this type are the commonest type of self-employed family peasant farms [*trudovye khozyaistva*] in our countryside. Apart from the customary kinds of market exploitation, they may be exploited by households of the first group, who loan them stock or cattle for productive purposes or grant them credit at commercial interest rates.

5. Households that, because of shortcomings in the use of land or shortages of the means of production or for some other reason, hire part of their manpower to households of the second group or to other employers. Despite the alienation of a part of their manpower, these households nevertheless continue to run a fully-fledged agricultural enterprise with a developed commodity sector.

   This type of household, if one excludes those whose members earn money outside agriculture, develops in a manner parallel to that of households of the second type and is very often the victim of all the kinds of exploitation enumerated above.

6. Proletarian households whose main income is derived from the sale of their manpower, that is, from their wages. These households nevertheless have their own farming activities, usually on a very small scale and nearly always for their own consumption.

It should be noted that when we drew up the above classification, we took no account of the impact of work inside and outside their villages and households. The reason is that in those regions where such economic activities are developed, this form of employment of individual members of families is equally common to all our six types of peasant household.

It is much to be regretted that neither our present nor still less our pre-war statistics, nor the statistics of the West, provide adequate data for measuring in quantitative terms the importance within the countryside of the six types of household listed above. The only available data are those relating to the percentage of households employing hired workers. In this respect, Table 1 provides us with some very revealing figures.

Unfortunately, we have no large-scale data as to the loaning of stock or of cattle for productive purposes, still less do we have any large-scale data on usury. Yet, according to the observations of the Volokolamsk field study of 1925, it was precisely these forms of capitalist exploitation which had become most widespread in the rural areas of the north. Thus, for example, among the households studied in this expedition, 27.3 per cent used work-stock belonging to others.

When completing our account of the different social types of peasant household, we also have to note the very important fact that none of the types which we have listed above is very often encountered *en masse* in a pure form. More often than not, households which employ hired labour will themselves, in turn, hire out their own labour; households which accept credit on terms amounting to usury will, on exactly similar terms, loan out their seed-drills or wooden ploughs.

This situation has become so confused that when preparing the material collected by the Volokolamsk expedition of 1925, its leaders (Ya. Anisimov, I. Varemenichev and K. Naumov), proceeding from the ideas of L. Kritsman, suggested the following method – which

Table 1 *Percentage of peasant households employing workers for fixed periods according to figures of the Central Statistical Agency (TsSU) for 1924*

	Province	%		*Province*	%
1.	Far North	2.0	11.	Lower Volga	0.8
2.	Northern	1.6	12.	Crimea	0.6
3.	North-West	1.6	13.	Soviet Caucasus	1.2
4.	Western	1.0	14.	Kirghizia	1.6
5.	Moscow, industrial	1.9	15.	Siberia	2.8
6.	Central Agricultural	0.6	16.	Far East	1.6
7.	Volga-Kama	0.6	17.	Turkestan	1.6
8.	Urals	1.6	18.	Byelorussia	1.6
9.	Bashkiria	1.0	19.	Transcaucasus	1.6
10.	Volga	0.8	20.	Ukraine	0.6

although very tentative nevertheless produces interesting results – for depicting the social nature of each peasant household in quantitative terms.

For the social description of peasant households they singled out two types of characteristic: that of *hire* and that of *the use of capital belonging to others*. They measured the capitalist elements in the structure of the household on the basis of the percentage of hired labour in relation to the total labour used within the household; and on the basis of the percentage of capital loaned outside, either in the form of money or of the hiring out of the means of production (stock, etc.). These percentages were added together in order to arrive at a coefficient of the degree to which the households were capitalistic.

In order to measure the degree to which the households were proletarianized, a reverse calculation was made. The resulting series of coefficients demonstrated how intensely the elements of capitalist exploitation were developing in some of the households in the flax-producing region.[2]

Having described the social make-up of our countryside through identifying the six types of household listed above, we can now turn to the basic question as to the importance of agricultural co-operatives for each of these types, and as to the future roles of each of the types identified in the pursuit of co-operative work.

It is absolutely obvious that the first type as such will not only be unable to bring its specific characteristics into co-operative work, but is sharply antagonistic to such work. The whole purpose of co-operatives involved in credit, marketing and the handling of machinery is to deprive this type of household of its basic functions. It is no accident that credit co-operatives in Germany developed and became consolidated as the direct result of their confrontation with usurers. In other words, households of the first type remain, and are bound to remain, outside the ambit of the co-operative movement.

In just the same way, the sixth, most proletarianized, type of household will also remain outside the ambit of the movement. It will do so not because it is antagonistic to co-operatives but because households of this type do not have the possessions which are needed for participation in co-operatives. Their tiny households – which, moreover, only produce for their own consumption – provide nothing for marketing co-operatives; the tiny area of land under cultivation makes the use of machinery unnecessary; and the volume of their purchases and credit will not make it worth while to hold shares in a co-operative. For this reason their active participation in co-operatives is possible only if they move up from the sixth type to the fifth type, which is sometimes possible if they are given co-operative credit.

All the remaining groups, that is the overwhelming majority of households in our rural areas, have possessions which, even though diverse, are sufficient for co-operative activities.

It is true that, with regard to the use of complex machinery, and to some extent also with regard to the purchase of the means of production and even the primary reprocessing of agricultural raw material, households of the second and third types are, because of their size, more able to do without co-operatives than are households of the fourth and fifth types. It should be remembered, on the other hand, that participation in co-operative activities, both with regard to the buying of shares and with regard to work with co-operatives, requires a certain minimum level of material well-being and a certain economic stability, and that this slows down the entry into co-operatives of the weakest households of the fourth and fifth types. For these reasons, we must expect an equal degree of participation in co-operatives by both these types of peasant households.

If one also remembers the greater entrepreneurial flair of peasant proprietors of the second and, to some extent, of the third types, then from a *dynamic* point of view one should even expect them to join in co-operatives earlier than the small households. This is to some degree confirmed by empirical findings, in so far as this is made possible by contemporary investigations of the social structure of the countryside. Thus, for example, on the basis of recently published works by I. Gritsenko, A. Minin and others, we can see the following percentage of mass peasant participation in the co-operative movement, subdivided into groups according to the size of household (shown by the dynamic studies of 1924).

It can be seen from Table 2 that co-operatives are being joined by the households which sow on the largest scale and by households with an average number of cows. Remembering that the number of cows is a better indicator of well-being than the land area under cultivation, it can be seen that these figures confirm our presuppositions.

Bearing in mind, however, the generally insignificant number of households which sow on a large scale and the overwhelming numerical preponderance of households of the middle groups, we have to recognize that among co-operatives, and indeed among the general mass of households, it is the middle strata which predominate.

Of course, the quantitative classifications which we have quoted, especially those relating to the land area under cultivation, are, as we have already observed, far from adequate for the purpose of giving a social-economic description of households involved in co-operation. However, even they lead us to suppose that, while there is an

overwhelming preponderance in the countryside of the middle strata, the other strata also take part in co-operatives.

The social foundation of agricultural co-operatives rests on two main groups of peasant household:

1. Households based on the employment, to a greater or lesser degree, of hired labour, for the purpose of obtaining an entrepreneurial income from the exploitation of this labour. In their pure form – that is, in reference to households based exclusively on hired labour – we shall henceforward term them *capitalist market-oriented farms [kapitalisticheskiye tovarnye khozyaistva]* (type 2).

2. Households which derive the overwhelming proportion of their output from the labour of the householder's family without employment of hired labour for entrepreneurial purposes; or, in a pure form, households which do not employ hired labour at all or else offer their own labour for hire. These we shall henceforward refer to as market-oriented family households [*semyeinye-tovarnye khozyaistva*], or simply as market-oriented peasant households [*tovarnye krest'yanskiye khozyaistva*] (types 3, 4 and 5).[3]

There exist in between these two a good many intermediate types: and, in its pure form, the capitalist market-oriented farm is at present encountered in Russian peasant conditions only very rarely. However, both of these types represent the main tendencies in the economic organization of the peasant homestead.

It would be a very great mistake to confuse these two types of enterprise. Each of them has its own organizational peculiarities and they not infrequently differ in their economic behaviour.

Readers who want to familiarize themselves more closely with the distinctive organizational features of these two types can get the necessary information from a number of special investigations.[4] In this book we shall therefore confine ourselves to the comparisons needed for the purpose of our subsequent explanations.

The main elements in the economic organization of the capitalist market-oriented farm are: 1. its gross income; 2. the material costs of production expended in kind or in money or in deductions for amortization; and 3. the wages actually paid to the wage-earners. 4. Gross income less material costs of production and of wages, which are covered by the capital advanced, produce 5. profit which is the sole entrepreneurial purpose of the farm. The profit is not connected with the labouring activity of the proprietor's family and it depends, other things being equal, solely on the amount of the capital advanced to the farm.

Table 2 *Social composition of peasant household members of co-operatives in the USSR (1924).*

	Groups classified according to the area under cultivation per household							
Desyatiny of land sown	0.0	0.1–1.0	1.1–2.0	2.1–3.0	3.1–4.0	4.1–6.0	6.1–8.0	8.1–10.0
Membership of agricultural co-operatives per hundred households of given group	2.5%	2.8%	3.2%	3.9%	4.0%	4.8%	5.7%	7.1%
Desyatiny of land sown	10.1–13.0	13.1–16.0	16.1–19.0	19.0–22.0	22.1–25.0	25.1–30.0	30.1–40.0	40.1 and over
Membership of agricultural co-operatives per hundred households of given group	9.1%	9.6%	10.3%	10.7%	11.0%	11.0%	16.0%	17.5%
	Groups classified according to the number of cows per household							
Number of cows	0	1	2	3	4 and over			
Membership of agricultural co-operatives per hundred households of given group	3.8%	3.9%	6.6%	5.7%	6.2%			

Groups classified according to the area under cultivation per household

Desyatiny of land sown	0.0	0.1–1.0	1.1–2.0	2.1–3.0	3.1–4.0	4.1–6.0	6.1–8.0	8.1–10.0
Proportion of households in co-operative system which have this area under cultivation	3.2%	9.5%	*16.8%*	*17.3%*	*13.0%*	*17.7%*	9.0%	5.1%

Desyatiny of land sown	10.1–13.0	13.1–16.0	16.1–19.0	19.1–22.0	22.1–25.0	25.1–30.0	30.1–40.0	40.1 and over
Proportion of households in co-operative system which have this area under cultivation	4.1%	1.8%	0.9%	0.5%	0.3%	0.3%	0.3%	0.2%

Groups classified according to the number of cows per household

Number of cows	0	1	2	3	4 and over
Proportion of households in co-operative system which have the number of cows shown	16.1%	55.7%	22.3%	4.1%	1.8%

Note: 1 Desyatina = 2.7 acres.

As a result of this, the size of a capitalist farm can in theory be expanded without limit by the hiring of more and more workers, while the degree to which intensive economic methods are used and the choice of the crops and specialized sectors which comprise the organizational plan and the way they are combined, are all totally determined by the influence which they may have on the size of profit (or, to be even more precise, on the rent, that is, on net income less the usual rates of interest on capital).

A market-oriented peasant family household builds its organization in a different way and in its case the main elements are: 1. the same gross income as above; 2. the same material costs, but instead of wages actually paid we have here the labour in kind provided by its family.

It is therefore impossible for us to identify any genuinely distinct or physically perceptible net income in a family household. The only reality which exists is that of the gross income. If one subtracts from this gross income the sum of the expenditure in real terms which is incurred in order to reproduce the capital for the purpose of the following year's output, then there remains available to the household's family a sum which can be set aside either for personal consumption or for capital accumulation. This sum has been defined by Professor E. Laur as the payment for the labour of the peasant family (*Arbeitverdienst*). It is, indeed, the aim of the family household to earn this sum, together with the opportunity of completely reproducing its real capital every year. In this case, to use the customary language of political economy, the interests of the peasant as an entrepreneur and his interests as a worker are inseparably and indivisibly merged into a single whole.

In view of the fact that in market-oriented family households work is performed by the family itself, the total amount of labour expended and, therefore, the overall volume of economic activity – given an adequate supply of the means of production – is determined (or at least restricted) by the size of the family, that is, by the number of its members who can work. It must be reckoned, however, that the question in this case concerns the maximum possible volume of economic activity to which the household aspires. The actual volume of economic activity usually falls short of the maximum in view of the shortage of capital and of the means of production which is usual in our peasant households.[5]

These, then, are the organizational patterns of the two types of enterprise. Where land is relatively abundant and where family households are able to employ their manpower more or less to the full, these two types of household differ little in their economic

behaviour because a high remuneration per unit of labour coincides with a high net income.[6]

However, the situation begins to change when we switch our attention to the areas of agrarian overpopulation, that is, to areas where the historically conditioned size of the peasant population significantly exceeds the manpower needed to cultivate the land at the level of agricultural intensity which yields an optimal net income.

A capitalist farm, in such conditions, would simply dismiss the workers which it did not need. But a family household which is unable to apply its labour to its small plot of land is in a different position; and since the peasant cannot dismiss himself from his own household he finds himself in an enforced state of partial unemployment. If, because of the circumstances, there is no way out of the situation through wage earnings, through crafts or through land leasing, then the position of the household becomes doubly distressing: its manpower is reduced to enforced idleness while the family's consumer budget is sharply curtailed. This prompts the householder to search for some way out of the situation which has arisen.

It is in these conditions that the difference between the family household and the capitalist farm begins to make itself felt: because the interest in the largest possible gross income and the interest in obtaining the largest possible *annual* remuneration of labour begin to outweigh the interest in the highest possible remuneration per unit of this labour. Unsatisfied needs, combined with a surplus of labour which is unable to find new means of employment, begin to weigh down on the household, compelling it constantly to seek out new ways of applying its labour on the same area of land, at the cost of a sharp drop in the remuneration per unit of labour.

It thus quite often happens that work which is deemed by a capitalist farm to be unprofitable is profitable in a market-oriented family household, and vice versa. For example, let us try to explain why, during the decades immediately before the war, the peasant households in the Tver and Smolensk provinces very willingly and energetically expanded the areas under flax cultivation although capitalist landlords almost entirely refrained from sowing flax.

Table 3 gives us a computation of income and expenditure for each *desyatina* [2.7 acres] of land under flax cultivation with a similar computation for land cultivated by oats.

For a household which is based not on its own members' work but on hired manpower, the sowing of oats is undoubtedly more profitable than the sowing of flax, because the profit from oats is twice as high per unit of land. And if we express it as a percentage of

Table 3 *Approximate production costs and income yield per hectare of land under flax and oats (on one's own land)*

Expenditure	*Oats*	*Flax*
Seed, horses, etc.	15 roubles	15 roubles
Human Labour	20 roubles	80 roubles
	(20 working days)	(80 working days)
Total expenditure	35 roubles	95 roubles
Gross income	45 roubles	100 roubles
Net income	10 roubles	5 roubles

the entrepreneur's capital outlay (as a percentage of expenditure), then the advantage of sowing oats is even more substantial, since the net profit in relation to the outlay of turnover capital will be 28.6 per cent for the sowing of oats while for the sowing of flax it will be no more than 5.3 per cent.

It is therefore quite understandable why capitalist farming avoided the cultivation of flax; and, according to the 1916 agricultural census, out of the entire area of land under flax cultivation only 3.1 per cent was attributable to the estates of large landowners.

Yet for a peasant economy in a state of agrarian overpopulation, the sowing of flax may turn out to be preferable to the sowing of oats, since it provides an opportunity for the fullest use to be made of the family's manpower and enables the family to obtain from that same *desyatina* [2.7 acres] a remuneration of 85 roubles for its labour, instead of the 30 roubles obtained from oats.

It is true that by applying 80 working days of his labour to a *desyatina* of land under flax cultivation, a peasant can, for each working day, obtain a remuneration equal to the value of the finished product, that is, 1.06 roubles, whereas a working day expended on the sowing of oats is remunerated at the rate of 1½ roubles.

There is no doubt that if a peasant were able to achieve a five-fold expansion of his sowings, and if he were able to apply all his labour to the sowing of oats, then he would not stand to gain from the cultivation of flax. However, should the tiny peasant plots in the areas of agrarian overpopulation sow nothing but oats, they would condemn themselves to enforced unemployment for the greater part of the year. Anyone who has observed a peasant household in areas of agrarian overpopulation in Russia can clearly see that the peasant plot, given the present three-field farming system, is not only incapable of feeding the household's family with its harvest produce,

but is unable to utilize even half of its manpower.

It has been proved by a number of statistical investigations that as a rule, a peasant family is able – on its own land and given the three-field system – to utilize between one fifth and one quarter of its available working time; and it is, of course, far from being able to earn enough income from the land to cover all the expenditure which is essential for its livelihood. Therefore a peasant household, when it has unused manpower and far from adequate resources for a livelihood, naturally seeks to find an outlet for its unused labour in order to increase, one way or another, its annual earnings.

When seeking an outlet for its labour, such a household will often accept a very low remuneration and is even prepared to undertake economic activities of a kind which – according to any calculation of the family's labour in terms of ordinary wage rates – not only bring no profit, but appear to produce an undoubted loss.[7]

Nevertheless, the peasants do undertake such work: they pay loss-making land-rents, they engage in unprofitable cottage industries, they sow crops on their fields which require a great deal of labour and yield a high gross income per unit of land, but which provide low remuneration for every working day expended. It is self-evident that all this is done in those cases where there is no other, more profitable, outlet close to hand for the employment of labour.

No one can feel enthusiastic about such a state of affairs. Agrarian overpopulation and the things that go with it are one of the most terrible scourges of our national economy. The struggle against it, as well as the struggle against the decaying three-field system based on extensive methods which exist in these areas, is an urgent task of our economic policy.

However, it must be noted that the misfortune in this case is the fact of agrarian overpopulation and all that goes with it – and in no way the ability of the peasant economy to adapt itself to this calamity. The peasant economy's flexibility and its ability to adapt itself in the face of the most difficult conditions of existence should be regarded as a very great virtue of its economic organization.

This capacity for resistance saves the peasant economy not only in cases of agrarian overpopulation but also in times of violent market fluctuations which totally ruin enterprises organized on capitalist principles. Let us suppose that a capitalist entrepreneur contemplates sowing five hectares [12.4 acres] of oats on leased land and wishes to ascertain whether this undertaking is advantageous.

His economic calculations will work out roughly as shown in Table 4. The fact of a net profit of 40 roubles, amounting to about 12 per cent of the capital outlay (320 roubles), will make the operation profitable and the entrepreneur will try to undertake it, since

Table 4

Expenditure	
Leasing of 5 hectares multiplied by 16 roubles	80 roubles
Seed	50 roubles
Gathering in of the harvest. 100 working days multiplied by 1 rouble 20 kopecks	120 roubles
Work with horses	30 roubles
Amortization and other overhead expenses	40 roubles
Total expenditure	320 roubles
Receipts	
88 quintals of oats at 375 kopecks each	330 roubles
48 quintals of straw at 62.5 kopecks each	30 roubles
Total receipts	360 roubles
Net income	40 roubles

investments of the capital in interest-bearing securities or by deposit in a bank, will yield a significantly lower profit (5 to 7 per cent).

But the situation will become entirely different if the price of oats is not 375 but, let us suppose, 312.5 kopecks per quintal. In that case, the calculation will appear as follows:

Income from the sowing	305 roubles
Expenditure	320 roubles
Loss	15 roubles

An undoubted loss will make the undertaking unprofitable for the entrepreneur and he will abandon sowing since he cannot undertake it without loss.

The peasant family – whose basic aim is not to obtain a rate of interest on comparatively minute capital, but to obtain remuneration for a year's labour – will make its calculations on an entirely different basis.

1. The peasant family will invest 100 working days in the land sown.
2. In addition it will spend 200 roubles in rent, in payment for seed and for the work of horses and on other expenses.
3. If the price of oats is 375 kopecks per quintal it will earn 360 roubles.

4. After subtracting from income the material costs which it has incurred, the family will earn, as a result of its labour, 160 roubles.
5. These 160 roubles represent the remuneration for the 100 working days expended by the family on the sowing of oats; consequently, the remuneration for one working day invested in this activity has been 1 rouble 60 kopecks.

This then is the remuneration for his working day which the peasant would compare with other possible rates of remuneration for his activities. And he will regard the sowing of oats as profitable once he has become convinced that no other activity will remunerate his labour at a rate above 1 rouble 60 kopecks.

For the peasant, this and this alone is the yardstick for ascertaining the profitability of alternative activities. If, let us suppose, an agricultural household pays for his work at the rate of 80 kopecks and work in crafts pays at the rate of 1 rouble, then he will 'have no time' to work in agriculture. The peasant uses the same yardstick when comparing the profitability of crops in his own household.

It need hardly be said that such a method of ascertaining profitability may lead to conclusions which are the exact opposite of the reasonings of the capitalist entrepreneur. Thus, for example, we have demonstrated that if the price of oats is 50 kopecks per quintal, the entrepreneur stands to gain nothing by sowing oats on leased land. But let us see whether a peasant can sow them. For this purpose we shall repeat the calculation already quoted:

1. The peasant family invests 100 working days;
2. In addition it will incur costs of 200 roubles for rent, seeds, etc.;
3. If the price of oats is 3.125 roubles per quintal, it will receive 305 roubles;
4. After subtracting from income the material costs incurred, the family will earn 105 roubles;
5. 105 roubles represent the remuneration for 100 working days; consequently one working day expended on the sowing of oats will be remunerated at the rate of 1.05 roubles.

But is the remuneration of labour at the rate of 1.05 roubles for one working day possible and acceptable for a peasant worker? It is not, if other earnings at a higher rate are open to him. But the answer is undoubtedly yes if no other, more profitable, earnings exist. In other words, whereas in an enterprise organized on capitalist principles, there appears a loss which erodes the farm's

material capital, in the case of a peasant household we are seeing a drop in the level of consumption, sometimes, it is true, almost down to the level of starvation.

No one, of course, can welcome peasant hunger; but one cannot fail to recognize that in the course of the most ferocious economic struggle for existence, the one who knows how to starve is the one who is best adapted. All that matters is that those who shape economic strategy should make this latter method superfluous. In any case, the peasant family household's capacity for resistance, which we have already noted, and which does not need to manifest itself in extreme forms involving hunger, serves to explain the peasant household's tenacity for life and its astonishing capacity for revitalization during various critical periods of its historical existence.

This is one of the capacities of the market-oriented family farm. We may confidently reckon that the development of agro-technology, the increase of capital investment in the peasant economy, its industrialization and mechanization, a properly organized resettlement of rural populations and, finally, the development of co-operatives, will in time render the manifestation of this capacity superfluous. But the fact must not be overlooked that in the numerous economic crises that still face our co-operatives, the exceptional capacity for resistance on the part of peasant households will more than once make it possible to deflect economic blows away from the co-operative apparatus on to the peasantry – thus rescuing co-operatives from inevitable destruction and paying the production costs of the new national economic system which we described in the first chapter.

These are the attributes of one type of peasant household, upon which agricultural co-operatives base their structure. Another type, which is based on the more or less developed exploitation of hired labour, is obliged, during years of severe crisis, to rely on reserve capital and funds. On the other hand, since its production is on a large scale, it gets the opportunity to utilize the advantages of large-scale farming and, in normal years, to produce great quantities of a homogeneous product at a low cost.

What then is the organizational significance of co-operatives themselves for the households described?

The two types of enterprise described – the capitalist market-oriented farm and the market-oriented peasant household – differ in their methods of economic calculation and therefore in the structure of their crops and specialized sectors and in the extent of their reliance on intensive economic methods. But they do not differ greatly from each other with regard to the technical organization of production itself; and they can therefore be examined together.

The organization of production in any agricultural enterprise will – except in certain special kinds of enterprise – nearly always begin by determining its scale, which is ultimately expressed by establishing a definite area of land for farming.

For large-scale cultivators, the land area was itself the starting-point. For the entrepreneurial capitalist farm, the determining factor is the amount of the capital advanced. For the family peasant household – if it has not been confined within the immovable boundaries of a plot – the determining factor is the existence of both a family and capital.

Only after determining its area is it possible to embark on the organization of the enterprise. Here, the first step is to determine in what directions it is to specialize; that is, in the case of a market-oriented enterprise, to determine the basic commodities which it would be most profitable to manufacture – given the current state of the market and the enterprise's characteristics. Having determined its basic market goals, or, as is usually said, the basket of commodities, the enterprise has to consider them in relation to two other balances: those relating to *fodder* and *consumption* or, more precisely, those ingredients which have to be produced by the enterprise in kind.

Having thereby sketched out a rough organizational *pattern* for the enterprise it is possible to embark on the preliminary organization of the particular piece of land, that is to divide up the land according to its economic purpose: into forest, common pasture, meadow and arable land; and to divide up the latter into fields for grain, flax, fodder, intertilled crops, etc.

When this outline has been drawn up, it is possible to begin organizing the tillage, fixing the seed turnover and composition of the crops, and making estimates with regard to sowing and harvesting. When the tillage requirements have been ascertained, the traction requirements can be calculated: that is, it is decided how many animals and vehicles are needed to work the fields and on what scale they are needed, allowing for the normal care of other land. The cattle, once its composition is determined, is correlated with the amount of fodder which it needs and with the supplies of fodder available to the enterprise – which can in case of need be supplemented by purchases of fodder, either in order to increase the overall number of fodder units within the enterprise, or to ensure that the general fodder supply contains the proper balance between albumen and carbohydrates. Having fixed the composition of the fodder, we can then go on to organize the cattle-rearing. Having completed the organization of the cattle-rearing, we can calculate what manure fertilizer is required, how it is to be distributed and

generally organized. After this, it becomes possible to organize specialized sectors: market gardens, orchards and hemp fields.

This completes the organization of the productive sectors and we can arrive at a calculation of the overall expenditure of labour which is required, the distribution of this labour over time and the extent of of its mechanization. After deducting the requisite amount of manpower, we arrive in regard to the family household at a guideline figure which, when compared with the manpower available to the household, enables us to ascertain whether the organizational plan drawn up is, or is not, attainable. The next thing is the organization of the stock and of the technical operations (mainly the primary reprocessing of agricultural products: butter manufacture, the reprocessing of flax, etc.) and the organization of the buildings and management of the farm. This completes the farm's technical organization, expressed in physical terms. It may be verified by a special calculation of the household's turnover of nutritive substances which shows whether the plan drawn up may involve despoiling or impoverishing the land.

After completing the physical and technical organization of the farm, and after making an economic calculation in the form of a financial plan, the farm's organizer proceeds to a final economic calculation in regard to the household, by preparing estimates for the household's output and for its anticipated annual balance-sheet.

This is almost inevitably the way that economic calculations develop in those cases where an organizational plan is drawn up consciously. But if – as happens in the overwhelming majority of peasant households – this plan is evolved, in the manner of the species of the animal kingdom, through a prolonged natural selection of the fittest, then the relationships which we have been examining exist in the economy without anyone being subjectively aware of them. A peasant runs his household in accordance with a definite organizational plan although he is often totally unaware of it, like Molière's Jourdain who spoke in prose for forty years without guessing that he was doing so.

As a result of these and similar arguments concerning the economic and natural conditions for the existence of a household, there arises a correlationship – which differs greatly in different areas and among different social groups – between the specialized sectors of a household and its overall organizational plan.

An example of such a complex organizational plan can be seen in Figure 1, which gives a graphic representation of the economic turnover of a peasant household in Starobelsk, in the Kharkov province.

Figure 1: Economic turnover of an average peasant household in the Starobelsk district of the Kharkov province (1910). Figures refer to roubles

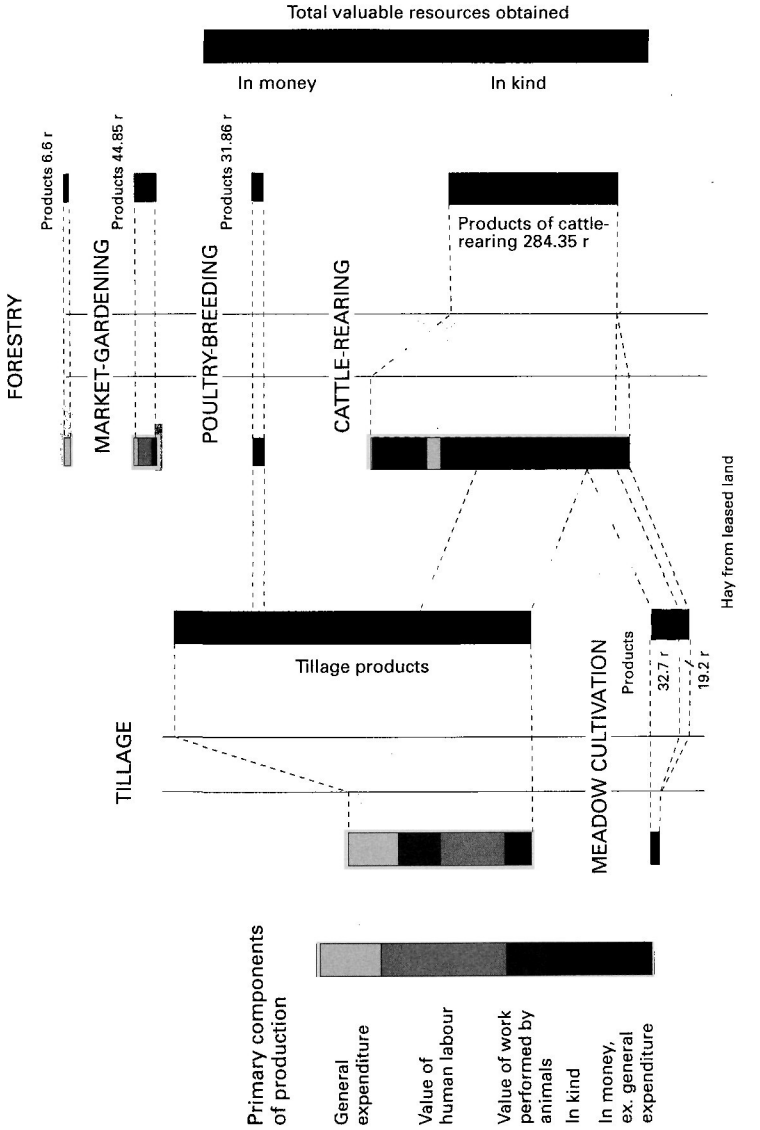

Figure 1 provides an extremely graphic representation of the annual turnover of valuable resources in an average-sized peasant household in the Starobelsk area. Beginning from the left-hand side, we can see, grouped into a vertical column, all the primary elements of production (the expenditure, the outlays of livestock and human labour, the material outlays in money and in kind, which are common to these households). Each of these categories of expenditure is tentatively shaded in; and records of money transactions are also preserved for inclusion among items of receipt. The height of each section of the column is proportional to the sum expended on the household under this section; and the scale for translating the value of the expenditure into figures is given on the right-hand side of the figure. All these expenses are then divided up according to the separate sectors of the household and, together with data of gross incomes, they form groups of columns, each of which corresponds to one sector of the household. Most of these groups are to some extent interconnected. The foundation of the whole structure of the diagram is the field crops category. Its primary elements are made up of various items of expenditure amounting to 306.27 roubles. The above-mentioned sum of valuable resources, after they have passed through the production process, which is denoted on the figure by two vertical lines, yields tillage products of the total sum of 585.63 roubles, which is also depicted by the appropriate column.

Part of the product thus obtained was sold (as shown in black), part of it was placed at the disposal of the peasant householder, and yet another part was again used for production and, as shown by the dotted lines, it passed into the poultry-breeding and cattle-rearing groups. Immediately below the field husbandry columns, there is a group of columns corresponding to the circulation of valuable resources in the cultivation of meadows.

Of the hay produced at a value of 32.70 roubles, a small part was sold; and all the remainder, as shown by the dotted lines, was used for cattle-rearing. Cattle-rearing, which gets its fodder stocks from tillage and the cultivation of meadows, itself involved expenditure in kind on feeding the herdsmen, as well as the cost of the work of looking after the cattle, a proportion of the general expenditure; and all the money expenditure on cattle-rearing. This column represents all the valuable resources expended on cattle-rearing. After they have passed through the production process they yield a product of the sum of 284.35 roubles which means that the cattle-rearing makes a loss.

The group of columns relating to poultry-breeding is constructed in exactly the same way. The groups relating to forestry and market gardens have no connection with the other groups. The extreme

right-hand column indicates the sum total of valuable resources obtained as the result of all the production processes. Since all the columns are built to the same scale, the figure makes it possible to analyse not only the organization of every sector of the household, but to compare the relative importance of these sectors and of the interrelationship between them.

We get an entirely different picture from two other cases which represent the correlation between sectors in an exclusively flax-cultivating household in the Volokolamsk district and a market-oriented dairy farm in the Vologda province. In the first case, the household's basket of commodities is based exclusively on field crops; and in the second, almost exclusively on cattle-rearing. There is also a very different structure relating to consumption and to fodder.

By breaking down the elements in these two programmes into their technical components we can see that agricultural production consists of numerous technical processes of differing natures which we can divide into the following categories:

1. Mechanical processes arising from the fact that land extends over space (tilling of the soil, sowing, transportation, gathering of the harvest, driving of cattle, etc.).
2. Biological processes of plant-growing and cattle-rearing (cultivation of plants, milking of cows, fattening of livestock, etc.).
3. Mechanical processes of the primary reprocessing of raw material obtained (threshing, separation of cream from milk, manufacture of butter, scutching of flax [i.e. dressing the flax by beating], etc.).
4. Economic operations linking the household with the outside world (buying and selling, credit relationships, etc.).

In a technical sense each of these operations must have identical purposes, both in a large-scale and, equally, in a small-scale farm. However, some of them are better suited to a large-scale farm, and others to a small-scale farm.

A significant majority of the processes of the first category can be carried out equally well regardless of the scale of the enterprise. A large-scale enterprise has a certain advantage with regard to the use of complex machinery; and a small-scale enterprise with regard to internal transport.

Processes of the second category are considerably better suited to a small-scale farm, since they require great attention and individual care. The only thing that is better suited to a large-scale farm is the process of stock-breeding since the employment of stock-breeders is

beyond the capacity of small peasant householders.

All the processes in the third and fourth categories can be considerably better organized in the most large-scale forms.

A detailed analysis of the various tendencies which we have noted towards either the enlargement or the reduction of scale in the different technical sectors of the household leads us to draw conclusions which are of crucial importance for our theory of co-operation.

The most important thing for an agricultural enterprise is not that it should be very large or very small, but that it shoud be of some intermediate, *optimum*, size where the advantages and disadvantages of a small-scale and a large-scale enterprise are balanced against each other. This may now be regarded as proved – by work undertaken by the Research Institute of the Agricultural Economics for the purpose of ascertaining the optimum size of agricultural enterprises, some of whose findings we summarized in Chapter 1. We showed that each system of farming had its own optimum scale of enterprise.

We made all these calculations in relation to agricultural enterprises as a whole. However, further analysis showed that if the organizational plan of the household was broken down into its different sectors, then it would be possible to ascertain for each sector its own peculiar optimum scale. There would be one optimum for the produce of meadow cultivation, another for tillage; and besides that, one optimum for grain crops, one for intertilled crops, another for seed production and yet another for different forms of reprocessing – varying in each case and, as a rule, varying very greatly, and so on.

In other words, the optimum scale for the enterprise as a whole is in no way the optimum for each of its sectors; and in order to get the very best results from applying the notion of an optimum to economic organization in agriculture, we need to forget about the oneness of an agricultural enterprise and to make an organizational breakdown of the organizational plan of an agricultural enterprise into its basic components. We then need to organize each component separately and autonomously on the specific optimum scale which is appropriate to it.

This theory, which we put forward several years ago and which came to be described as the theory of 'differential optima', is one which at first sight seems paradoxical and incapable of being implemented. Nevertheless, if one surveys the practice of co-operative structuring it is not hard to see that it is precisely here that our theory finds its full realization. It can even be said that the theory of differential optima is the basic organizational idea which underlies agricultural co-operation; and that only through co-operation can the

theory be put into practice.

Because of the fact that it is technically possible to achieve a breakdown of its organizational plan into its individual components, the peasant household has been able to separate *all* those mechanical and economic operations whose technical optimum scale was greater than that of the peasant household, from the remaining operations. And it has been able, together with other similar households, to organize these operations on a large scale and indeed on an optimum scale, in a co-operative form.

Nevertheless, those operations whose optimum scale did not exceed that of the peasant household remained totally in the hands of the family household.

Thus, in the first category of technical processes, the use of machinery and engines was allotted to a special machinery association, while in the second category the selection of cattle and regulation of standards for the feeding of cattle were separated off, as also was the reprocessing of milk into butter in the third category. These were organized into appropriate co-operatives. Almost all of the fourth category of economic processes was organized entirely on co-operative principles in the form of purchasing and consumer associations, marketing associations and credit co-operatives. It must at the same time be noted that none of these processes, when organized on co-operative principles, lost their economic ties with the parent economy. And they imparted to the co-operative all those special features of economic organization, as well as that same exceptional capacity for survival, which we discovered in the peasant economy.

Capital within a co-operative plays the same ancillary role as in a family household. The scale of a co-operative enterprise is determined – as in the case of a peasant household – not by the amount of available capital but by the needs of the combined households.

Consumer and purchaser co-operatives cannot have a greater turnover than the purchasing power of their members. The size of a butter-producing factory is determined by the amount of milk available to its members. The credit turnover of a credit association corresponds to the credit turnover of its members, and so on.

The very structure of a co-operative and the profitability or otherwise of what it does are likewise determined not by the quest for a maximum profit on the capital invested in the enterprise, nor by the interests of the co-operative institution itself, but by the incomes from the labour of its members earned through the co-operative, and by the interests of their households.

A co-operative will be extremely useful, therefore, even if it

produces absolutely no net profit as an enterprise, but nevertheless increases the incomes of its members. And conversely a co-operative will be harmful if, for example, if produces 10,000 roubles' worth of profits, but if, owing to unskilful management, the peasants suffer a shortfall of 40,000 roubles of income from their labour. The success of co-operatives is measured by the growth in their members' incomes, and not by the profits of the co-operative itself. There is the members' income and nothing else.

The nature of co-operatives, as an integral component part of the family household, becomes particularly visible from a comparative analysis of the capacity for survival of a co-operative *vis-à-vis* a capitalist enterprise. Let us, for example, imagine a co-operative system for the marketing of eggs.

A private trader engaged in the egg trade buys eggs in order to sell them on at a higher price. If, after buying this commodity, the price of eggs on the market substantially falls, then the private trader is compelled to sell them below the price which he paid and makes a loss. But the co-operative is in a different position. It does not engage in any trade, it does not buy a commodity; and for it, the difference between the purchasing and the selling price is of no importance. Co-operation represents the organized marketing of the products of the peasant's labour; and if the price of eggs falls, this means that the peasant households which sell their output through the co-operative will get a lower remuneration for their labour; and, because of the special features of the peasant household, neither the co-operative apparatus nor that of the peasant household need suffer.

Such are the reasons which compel us to acknowledge that co-operation in the villages has no self-contained existence of its own but is a collectively organized extension of family production living the same life as the parent organism.

Professor A. Chuprov once noted in one of his writings that, in relation to agriculture, the idea of co-operation was no less significant than all the most important technical discoveries. And we can indeed acknowledge that the spontaneously evolving method of splitting up organizational plans into individual groups of processes, and of organizing each of them in accordance with their optimal economic and technical parameters, is providing agriculture with a most excellent economic apparatus.

What has just been said serves, in outline, to explain the importance of co-operation for the peasant economy; but it also points to ways of studying this economic phenomenon and of making this into something systematic.

In essence, no system of classification can lay claim to the absolute

truth and no classification can be exclusively correct. It can only be the simplest or the most convenient one in relation to the goals which it is meant to serve. We are therefore prepared to accept the validity of any classification which serves the purposes intended by its authors.

When examining the emerging trend of the co-operative movement we must try, first of all, to classify all the diverse things observed into homogeneous categories in order more easily to understand the diversity of types and forms within the phenomenon being studied.

It very naturally follows from our concept of co-operation that this preliminary systematization of the data has to be carried out by reference to those economic processes which are to be organized on co-operative principles. Once we have acknowledged that a co-operative is merely a collective method of organizing the individual components of the organizational plan of a peasant household, it follows that when we build a classification system we must inevitably examine the role of each particular type of co-operative system in this organizational plan.

If in our mind's eye we envisage the organizational plan of an agricultural household, and if we then break it down into its constituent elements and think about which of those elements are most suitable for large-scale organization, this will enable us to determine all conceivable types of co-operation.

It is clear to us that large-scale purchases of the means of production and of articles of everyday use are more advantageous than are small-scale retail acquisitions – and this provides a basis for purchasers' co-operatives. It is equally obvious to us that a large-scale enterprise will obtain credit more easily and more cheaply than a small-scale family household, and that a large-scale organization will be able to sell its products more advantageously than a small-scale household. Hence the bases for credit and marketing co-operatives. The reprocessing of milk into butter, the scutching of flax and the drying of vegetables and fruits are most cheaply and efficiently carried out in factory conditions. Hence there are grounds for organizing co-operative workshops. A large-scale unit is in a better position where the use of complex machinery and stock-breeders is concerned. Hence a further dimension of possible co-operative work, and so on.

By thus analysing the organizational plan of the peasant household and identifying those elements within it which are suitable for co-operation, we can easily draw up a long list of possible forms of co-operation. However, when comparing such a list with real life, we may note that many of the types of co-operation which we have

identified analytically do not yet exist in reality. They have not yet been discovered in practice, just as our chemists have not yet discovered many of the elements of Mendeleyev's table of chemical elements. There is no doubt that the co-operative movement will, as it develops and takes root, bring to life more and more of the kinds of co-operation which we have identified.

When classifying particular forms of co-operative into more general categories, we can single out the following headings:

1. *Economic processes: the mechanical processes arising from the space of the land being worked*
   (a) Machinery users' associations.
   (b) Associations for joint ploughing, etc.
   (c) Associations concerned with water and land melioration.
2. *Biological processes*
   (d) Bull pedigree associations.
   (e) Societies for systematic stockbreeding.
   (f) Associations concerned with quality inspection.
   (g) Associations concerned with the selection of breeds.
3. *Mechanical processes of primary reprocessing*
   (h) Threshing associations.
   (i) Butter manufacturing associations.
   (j) Potato-grinding, vegetable-drying and similar associations.
4. *Economic operations linking the household to the outside world*
   (k) Purchasers' co-operatives.
   (l) Marketing associations.
   (m) Credit associations.
   (n) Insurance associations.

This classification, which is derived from the organizational plan of the peasant economy, is somewhat unusual in contemporary co-operative thinking. It is presented in order to help clarify the importance within the peasant household of particular forms of co-operation. But we shall henceforward pursue our study, not in the sequence of the system shown above, but in an order which is more usual and which is more appropriate to the historical sequence in which forms of co-operation actually developed and to the importance of these forms for our co-operative movement.

From an organizational and historical point of view, by far the most important place in our country belongs to the system of co-operative credit; and it is with this that we shall begin our analysis. Apart from that, the oldest and most firmly established type of co-operation is

that which relates to purchasing. The next place is occupied by marketing co-operatives and, after that, by co-operatives concerned with reprocessing linked with marketing.

After completing our analysis of these most highly developed and important branches of the movement, which are almost entirely connected with the external relations of the household, we shall then go on to clarify the role and the forms of the co-operative movement in the organization within the household of biological and mechanical processes – in relation to associations concerned with machinery, inspection, stockbreeding and others of a similar kind. Here, we shall devote special attention to those forms of peasant co-operation which are, at the present time, the newest and the least studied.

In accordance with our plan of work we shall attempt first of all to establish in each case the economic nature of the phenomenon which is to be brought within the ambit of co-operation. By analysing its nature we shall establish what organizational problems confront co-operative organizers in each of the cases studied and what are the organizational forms which life has actually put forward in order to solve these problems.

NOTES

1. Editor's note: For a discussion of the Russian peasant land tenure and social organization, see G. T. Robinson, *Rural Russia under the Old Regime*; also T. Shanin, *Russia as a Developing Society*, Newhaven, 1979.
2. Editor's note: The methodology of analysis was fully developed by V. Nemchinov: see *Sobrannye sochineniya*, Moscow, 1970, Vol. 1.
3. Since our concern here is to study co-operatives, we shall not include economies of the natural type in our analysis. The natural economy is alien to co-operatives in the present-day meaning of the word.
4. The organizational foundations of the market-oriented family household are explained in N. P. Makarov, *Organizatsiya khozyaistva* [The Organization of the Economy], Moscow, 1925; and in A. Chayanov, *Organizatsiya krest'yanskogo khozyaistva*, published as *The Theory of the Peasant Economy*, Madison, 1982. When studying the organization of the capitalist commodity economy use may be made of any course on the organization of a large-scale economy.
5. The factors which determine the scale of a family household are extremely complex and we would refer readers who want to familiarize themselves with this question to chapter three of our book referred to in note (4) above.
6. The differences will always be determined by the need of the self-employed peasant family farm [*trudovoye khozyaistvo*] to achieve a more even distribution of labour throughout the months of the year and by the opportunity available to big capitalist enterprises to utilize the advantages

of a large-scale economy (complex machinery, etc.).

7. Editor's note: The facts of the matter were also documented in our time. See, for example, the study of the Egyptian peasantry by E. Taylor, in T. Shanin (ed.), *Peasants and Peasant Societies*, Oxford, 1982.

3

Credit in the Peasant Economy

In order to achieve a sufficiently clear and distinctive approach when investigating the forms of credit organization used by co-operatives in practice, we first need to become familiar with the role that credit plays, or can play, in the turnovers of the peasant economy.

Only after making a detailed study of every type of household, with respect to the make-up of its capital and of its turnover – that is, of the ways in which capital is laid out and replenished – are we able to judge how far the various conditions on which credit is made available are suited to this type of economic organization; and how far, in the conditions of this circulation, the sums advanced on credit can be repaid by the borrower. The material collected by expeditions to investigate budgets – undertaken both before the war and at the present time – as well as special calculations recently made, enables us to build up a fairly detailed picture as to the make-up of the capital of the peasant household and as to its turnover.

Table 5 gives us some idea of the extent to which manpower was equipped with the means of production. The figures quoted, like all figures derived from budget studies, provide us with very precise figures which visibly show the interrelationship between different components of basic capital. But it must all the same be borne in mind that budget figures are nearly always based on a record of the better educated households, which are able to provide detailed economic information about themselves. Because of this, they usually provide us with somewhat inflated figures in comparison with the mass average.

In order to correct this inaccuracy, V. A. Lipinskii and I made a calculation of necessary amendments and offered an assessment of

Table 5 *Value of the implements of production of the peasant economy calculated per household immediately before the war*

Districts	*Value per household in roubles*				*Total value per hectare of land under cultivation*
	Buildings	*Cattle*	*Stock*	*Total*	
Starobelsk, Kharkov province	420.5	471.2	100.4	993.6	103.4
Volokolamsk, Moscow province	909.0	268.0	189.0	1365.6	229.7
Vologda, Vologda province	453.0	137.0	82.3	672.3	257.8
Totem, Vologda province	313.9	108.9	44.1	466.9	126.3
Gzhatsk, Smolensk province	1123.6	212.7	83.2	1419.5	330.1
Sychev, Smolensk province	1262.0	174.0	100.2	1536.2	256.3
Porech, Smolensk province	1309.0	267.0	74.0	1650.6	275.0
Dorogobuzh, Smolensk province	717.0	271.5	82.0	1070.6	237.8
Voronezh province	341.0	130.2	79.1	652.2	68.2
Tambov province	550.5	316.5	98.1	965.1	148.3
Chernigov province	504.5	512.5	238.8	1255.8	153.2
Novgorod province	489.0	173.3	82.0	500.3	148.4

the means of production available to average peasant households according to the mass data of 1924. We have arrived at the following picture of the extent to which average peasant households in different provinces of the USSR were equipped with the means of production, expressed in money terms (Table 6).

Table 6 *Value of cattle, stock and buildings per peasant household (in gold roubles) (1924).*

Regions	*Roubles per household*	*Regions*	*Roubles per household*
Far North	668.4	North Caucasus	822.3
Northern	635.3	Crimea	907.3
North-Western	784.0	Kirghizia	674.3
Western	879.3	Siberia	675.0
Moscow Industrial	902.8	Far Eastern	674.4
Central Black Earth	578.1	Turkestan	696.8
Volga-Kama	849.6	Byelorussia	791.2
Urals	709.2	Transcaucasia	709.5
Bashkiria	560.4	Ukraine	691.4
Middle Volga	623.7		
Lower Volga	687.6	For the USSR	716.1

There is a certain variation in the figures which is due not only to the varying quantities of the means of production in households, but also to variations in the prices of the means of production in different areas, which are sometimes very substantial. Also, it is essential, when examining these figures, to remember that they are no more than arithmetical averages. Because of the demographic and social differentiation between peasant households, the extent to which they are provided with capital varies greatly. Thus, for example, according to an investigation of budgets in Novgorod (1910) the group which sowed on a small scale had 872.37 roubles of capital per average household, while the group which sowed on a large scale had 2,349.63 roubles. In the Starobelsk district in the Kharkov province (1911), the amount of basic capital per household varied between 455.75 and 2,925.02 roubles. Of particular interest are the results of the social analysis of the last Volokolamsk expedition of 1925 (Table 7).

Therefore, when we set out to analyse the organization of capital in peasant households, we have to bear in mind that in this respect, they represent large variations of magnitude. However, what is

Table 7 *Value of household buildings, cattle and agricultural stock among different social groups of peasant households in Volokolamsk 1925*

	Value per household in roubles			
	Buildings	*Cattle*	*Agricultural stock*	*Total*
Proletarianized households	72.08	89.80	27.51	189.39
Semi-proletarianized households	219.53	165.51	54.49	439.43
Households based solely on their members' labour	361.74	287.20	146.91	795.85
Households mostly based on their members' labour	755.19	482.30	389.91	1627.40
Semi-capitalist households	1360.49	512.90	1145.23	3018.62

important to us in the present book is not so much the extent to which labour is equipped with capital as the conditions in which this capital circulates within the household.

The following excerpt from the calculation taken from the main volume of a book-keeping analysis of an average household in Volokolamsk enables us to gain an insight into the economic turnover of capital invested in buildings. When looking at the figures quoted, we must first of all note that the stock with which the household began the economic year was subject to considerable wear and tear during the year; and its value declined from 187.04 to 156.84 roubles (see Table 8). In order to replace the worn-out and disused implements in the stock, new stock was acquired which cost 12.04 roubles (the so-called capital repair stock). After that, the maintenance of the stock in working order required current repairs costing 10.82 roubles.

Thus in the Volokolamsk district the cost of annual purchases (renewal) of stock amounted to 6.4 per cent of its overall value within the household.[1] And current repairs came to 58 per cent of this overall value. In the Starobelsk district in the Kharkov province, purchases comprised 18.8 per cent and repairs comprised 5.2 per cent of the initial value of the stock.

In compiling these calculations, we should also note the expenditure on small items of stock which became worn out during the year

Table 8 *Calculation of stock of an average household in Volokolamsk*

Account to which credited	*Debit*	*Roubles*	*Roubles*	*Credit*	*Roubles*	*Roubles*	*Account to which debited*
Capital	Value of stock at beginning of year	187.64		Value of stock at end of year	168.88		Capital
Cash	Purchase of new stock	12.04		Deducted: for tillage	44.20		Tillage
	Repairs	10.82		92%			
	Small purchases	6.43		for meadow cultivation 8%	3.85		Cattle-rearing
Total:			216.93			216.93	

and which – like current repairs – relate to current expenditure and not to the turnover of basic capital. What is particularly important to us in the above analysis is the evidence of constant wear and tear of the basic capital invested in the stock. The rate at which such wear and tear occurs depends on what the implements consist of. The more the household possesses complex machinery which serves for many years, the lower this rate will be.

A similar picture emerges from an analysis of the existence of basic capital in buildings. Thus a calculation relating to buildings with regard to this same household in Volokolamsk gives us the following picture (see Table 9). The make-up of the debit side of the account is similar to the account relating to stock. However, because of the greater durability of buildings the annual average percentage of expenditure on erecting and repairing them amounts in all to 5.2 per cent of their total value. The corresponding figures for the Starobelsk district are 5.1 per cent.

The annual wear and tear and the annual expenditure on the maintenance and repair of stock and buildings, which we analysed above, represent the cost of the use of this capital and constitute an overhead cost for the various branches of the economy which utilize them. This cost, if calculated in relation to one *desyatina* [2.7 acres] of land and one worker, produces the following rates for the Volokolamsk district (Table 10).

We can see that because of the buildings' long period of serviceable use, the annual cost of their maintenance is no greater

Table 9 *Inventory of buildings of an average household in Volokolamsk*

Account to which credited	*Debit*	*Roubles*	*Roubles*	*Credit*	*Roubles*	*Roubles*	*Account to which debited*
Capital	50% of value of hut at beginning of year*	218.18		50% of value of hut at end of year	209.45		Capital
	Value of services at beginning of year	472.72		Value of services at end of year	452.81		
			690.90			662.26	
Cash	Erection of new buildings	2.80		Deductions: for tillage 65%	9.25		Tillage
	Repairs	14.60		for market-gardening			Market-gardening
	Insurance	14.32		0.5%	0.30		
			31.72				
				for meadow cultivation 5.5%	3.32		Meadow-cultivation
				for horse traction 16.3%	9.95		Horse traction
				for product-ive cattle-rearing 12%	7.54		Cattle-rearing
						60.36	
Total:			722.62			722.62	

* Footnote: The other half of the value of the hut is set against the personal account of the family.

for the household than the cost of maintaining stock; despite the fact that within each household, the capital invested in buildings is considerably greater than the capital invested in stock.

Entirely different principles apply to the turnover of the capital which the household has invested in cattle, as can for example be

Table 10 *Value of usage for one year*

	Per hectare of arable land	*Per hectare of meadow*	*Per worker*
Stock	4.92 roubles	1.06 roubles	13.99 roubles
Buildings	4.32 roubles	1.09 roubles	18.50 roubles

seen from Table 11, which relates to an average peasant household in Starobelsk.

When we come to the last category of capital – turnover capital – we have to emphasize its unique position in a self-employed peasant family farm [*trudovoye khozyaistvo*]. First of all, its relative scale in a family farm is considerably more modest than in a capitalist farm, since it lacks the main item of expenditure which in a capitalist enterprise is derived from turnover capital, namely, wages. The remaining components, that is, seeds, manure and fodder, to a large extent complete their turnover within the household in kind; and only part of the expenditure takes the form of money transactions.

When attempting to ascertain the scale of turnover of capital, we have to isolate from the overall expenses and receipts those items which should be so classified. Thus, for example, in the Starobelsk district of the Kharkov province, the items shown in Table 12 may be included among the expenses defined as turnover capital.

Thus turnover capital which is replenished every year in full, even though it exists mostly in kind, nevertheless represents a very substantial magnitude in the life of a peasant household. According to calculations which we made for 1924, throughout the USSR for every 100 roubles of basic capital in the peasant household, the latter had shown 15.9 roubles of turnover capital (i.e. seeds, fodder, money expenditure, etc., but not counting the value of the labour of its family). At the same time, this figure fluctuated sharply, depending on what farming system was being adopted. It was lowest in the Transcaucasian region (8.4 roubles per 100) and in Turkestan (9.1 roubles per 100); and it was highest in the cattle-rearing regions of the far north (23.3 roubles) and of the west (22.8 roubles).

The capacity for capital formation varied greatly among different strata in rural areas. Thus, for example, for the Starobelsk district (1910) we have the data of Table 13.

It is therefore quite obvious that a credit transaction, and the possibility of repaying the loan, can be examined only in connection with the processes which we have described of the circulation of capital within the household to which credit has been advanced. This

Table 11 *Composition and movement of capital invested in cattle*

Groups classified according to area of sowing per household	*Value of cattle at beginning of year*	*Sold for sum of*	*Died or disposed of*	*Slaughtered*	*Bought for sum of*	*Increase in value during year**	*Off-spring valued at sum of*	*Obtained in kind from elsewhere*	*Value of cattle at end of year*
				ROUBLES					
0.00	19.9	10.4	0.7	4.3	12.2	1.5	1.5	1.7	19.9
0.001-3.00	50.2	40.1	0.7	2.7	42.2	3.2	3.2	1.6	54.2
3.01-7.50	228.8	71.1	22.6	22.4	68.1	28.4	28.4	17.4	226.9
7.51-15.00	539.0	138.1	31.8	49.0	123.7	31.2	31.2	33.9	519.0
15.01	961.0	181.6	59.5	79.2	145.9	69.3	69.3	69.3	937.0
Average	412.4	100.7	26.8	36.1	88.9	32.4	28.6	3.3	402.0

* Footnote: This includes the value of animals which have grown as well as all other changes in the value of animals, ascertained by comparing their value at the beginning and end of the year.

Table 12 *Economic expenditure out of turnover capital in an average household in the Starobelsk district*

	In kind	*In money*	*Total*
Payments and obligatory services	–	12.54	12.54
Journeys to the market and to towns	–	1.71	1.71
Rent	–	30.92	30.92
Hire of workers	–	17.05	17.05
Hire of agricultural implements	–	0.94	0.94
Other general household expenses	–	10.37	10.37
Seeds for planting in the fields	47.40	–	47.40
Seeds for planting in market gardens	2.00	1.00	3.00
Fodder for cattle	214.5	4.24	218.74
Payments to shepherds	0.84	1.92	2.76
Shoeing of horses	–	1.01	1.01
Payments for work done	–	2.94	2.94
Grain and other food for poultry	9.47	0.54	10.01
Total per average household	274.26	85.18	359.44
Total per worker	77.0	23.86	100.86

idea, which might have seemed quite obvious and which was frequently applied in practice when credit was advanced, for some reason failed for a very long time to be reflected in economic theory. Credit was reduced to a simple trade in capital or, more precisely, to a trade in the use of capital, which was remunerated by payment of interest for this use when the loan was reimbursed. The creditor always assumed that his loan was secured by the property of the borrower; and even in the case of a loan granted on the security of goods, the lender in no way required that the money should be invested in the handling of this commodity. His sole interest was in the selling price of the commodity pledged.

The first attempt to provide a somewhat different interpretation, when analysing credit turnovers, was made by the Russian

Table 13 *Rates of reproduction of capital among groups with differing areas under cultivation (Starobelsk district)*

Area under cultivation (Desyatiny)	*Expenditure on reproduction of capital*		*Expenditure on capital formation per 100 roubles of expenditure on personal needs*
	Total	*including money expenditure*	
0.05– 3.00	87.31	31.32	48.8
3.01– 7.00	208.38	58.71	68.9
7.01–15.00	472.40	150.32	96.2
15.01–	894.29	309.62	112.7
Average	398.76	131.90	92.5

economist, V. Kossinskii; and what occasioned it was the study of co-operative credit in Germany.

V. Kossinskii started out from the assumption that capital advanced on credit to a borrower goes through a productive turnover in the latter's household in accordance with Karl Marx's classic formula: D − T − D + d, where at the end of the resulting cycle the sum of money D is returned to the borrower together with an amount of surplus value realized to the amount of d. Part of this surplus value represents interest on the loan, while the other part of the surplus value d is retained as the borrower's income and represents his capitalist motive for using the capital which he has borrowed.

According to this theory, the success of a credit transaction depended on the success of the cycle of capital circulation; and the loan itself was economically secured not by the borrower's property, which only came into the picture in the case of bankruptcy, but by the very success of the circulation of the capital obtained by the borrower, which made it possible to realize not only the value D but also the surplus value d. Therefore, according to Kossinskii's definition, credit was an example of 'the circulation of capital in an enterprise owned by somebody else'

Kossinskii's theory, which made a powerful impression on the economists of his time, did provide a correct basic idea for elaborating the problems of credit; and it was immediately recognized as a basis for the granting of co-operative credit for the purposes of production. Its primary weakness was its too formal interpretation of Marx's formula. A reader who lacked knowledge of

practical life might suppose that capital advanced on loan had the nature of some kind of mystical substance which, as it circulated through the cycle of production, continued to preserve its distinct identity; and that it would – always, in every case, automatically and without any effort by the particular borrower – end up by producing D + d.

In reality, however, the process of capital circulation is much more complex. Capital loaned for production (D) has – at the moment when it exists in the form of money – got a certain money value and continues to do so when it is converted into the initial means of production and raw materials, since at this stage all the means of production which are purchased are equal in value to the value of the money spent on purchasing them: that is, their value is determined by the current market situation, which reflects the social relationships existing in the country's economic life at the moment of the purchase. However, from the moment when the production processes begin, when the initial means of production and raw material cease to appear in their original condition and become half-finished products, they also become things and not values. They constitute the T of Marx's formula calculated, however, according to units in kind. If for any fortuitous reason the production process has been interrupted before the cycle is complete, the realization of all these 'things' on the basis of current market prices will never give us the full amount of the capital expended. The 'things' of our production process cannot acquire the valuation which concerns us as organizers of production until the production cycle has been completed – when we have finished products ready to be sold, that is, commodities which we have produced.

Their sale on the market (or market valuation) provides us with a fresh sum of money. But this sum cannot in any sense represent the mystically revived abstract substance of the original capital D, because the market valuation of the commodities obtained is not made in relation to the same commodities which were the yardstick for the original valuation; and, above all, it was made at a different moment in time and in an already different market situation, since the production process cannot assume a static national economy.

What happens from the market's point of view is not the restoration of the value of the old capital D1 in terms of book-keeping records and calculations, but the creation of new money capital D2. If the product which we have produced remains as socially necessary in the country as it was at the time when we drew up our production estimates, and if the production costs incurred were no higher than those currently dictated by the interplay of socially necessary economic factors, then the system of market

prices guarantees that, in our particular case, D2 will be greater than D1; that the sum of D2, when realized, can be divided into D1 and d; and that D1 can again be invested in a new production cycle.

Thus, when examining the process which is, not quite correctly, termed the process of capital circulation, we have the following series of conditions on whose successful fulfilment and appropriate combination the success of the entire production cycle depends.

1. The availablity of a certain money capital, D1.
2. The acquisition – out of the sum of money D advanced for the production of capital – of the necessary means of production and raw materials; and the hire of manpower at prices which do not exceed the estimates of profitability.
3. The use, in the process of production, of the 'things' which have been bought and of labour with the technical skill and success needed to ensure that the cost of the end product T is no greater than its socially necessary cost.
4. The sale of the end product at currently prevailing prices corresponding to the social conditions in the country's economy at the time when the manufactured commodities are sold; and the formation of a new sum of money D2.
5. The allocation – out of the sum of money D2 obtained from the sale of the commodity – of fresh capital to be advanced for the continuation of production at the same level. This will be on the same scale – D1 – if market conditions are unchanged; or D3, in the event of conditions having changed.
6. The division of profits (on the principle d = D2 – D1 or d = D2 – D3) between the sum which the owner takes out of the enterprise and the sum which he allocates for the expansion of the farm's capital.

Marx's old formula has been translated, in the above case, from static into dynamic terms. When modified in this way, it really can, as V. Kossinskii rightly supposes, prove invaluable for an understanding of the credit turnover and its importance in the outlay and renewal of capital circulating in production. It is, however, necessary to note certain distinctive characteristics which the process of circulation we described acquires in the case of market-oriented peasant households which do not use hired labour.

All work in such a household is performed by the manpower of the family itself. This means that wages – actually paid out at levels spontaneously and objectively determined by the labour market in accordance with the social relations currently prevailing in the country's economic life – do not exist as a real economic

phenomenon in a peasant family household. Expenditure on personal needs by those working in a peasant household represent not the spending of an objectively determined wage, but the earmarking for the given item of a part of the household's overall income, which is also used to finance the renewal of capital. Because of this, the process of capital renewal in peasant family households is linked to the level of well-being attained in the given year.

Indeed, if we are speaking of real economic phenomena, the gross income of a capitalist farm can be broken down into the sums spent on the renewal of capital (renewal of the means of production and of the wages fund) and pure profit. If the production cycle has turned out to be so unsuccessful that gross income not only fails to yield any profit but fails even to achieve the renewal of capital, then the entrepreneur, unless he can draw on credit, is obliged to curtail the renewal of his capital and thus curtail production itself.

The situation is somewhat different for a market-oriented peasant family household, whose gross income divides into three parts: 1. The value of the renewal of the material means of production, as objectively determined by the market; 2. the family's personal consumption; and 3. sums set aside for the purpose of capital accumulation.

In the event of a fall in gross income – as in the case of a farm organized on capitalist principles – one of the first results will be a reduction of capital accumulation. In the event of a further drop in gross income, a family farm, unlike a farm which pays wages, can continue to maintain the volume of activity at the old level, by cutting personal consumption so as still to pay for the complete renewal of the material part of its capital. As is shown by a statistical analysis of budgets,[2] this renewal of capital at the cost of reducing consumption continues for a fairly long time; but it does so only up to a certain point, beyond which there is a parallel reduction in both cases.

This special characteristic of the peasant household considerably enhances the ability of peasant households to renew their capital and makes it easier for them to recover from economic crises.[3] We must, of course, take this, too, into account when examining the forms and conditions for the granting of credit to peasant households.

Another, and no less important, special characteristic relating to the renewal of capital in peasant households arises from a further fact which stems from the small scale of the enterprise.

In the preceding tables, we showed the rates of wear and tear and of the corresponding renewal of basic capital. In terms of national economic aggregates, involving hundreds and thousands of households, these rates have the actual significance of actual expenditure continuously undertaken every year. A thousand peasant households

possessing, let us suppose, 2,000 ploughs may be expected, according to the law of large numbers, to discard and replace 250 ploughs every year; this proportion remains significantly stable from year to year and corresponds to the percentage of amortization.

In large farms, which comprise hundreds of items of stock, annual expenditure on the renewal of capital will, by virtue of the same law of large numbers, also be relatively constant and continuous from year to year. But we find something different in the case of the small family enterprise whose items of stock consist of only a few units; and where the annual rates of renewal (amortization) are expressed as proportions of an item. In this case, the discarding of old items and the acquisition of new ones is far from being an annual occurrence. The renewal of capital over a number of years may be equal to zero; and subsequently, in some one particular year, it is reflected in figures which are many times higher than the normal percentage for amortization, even in large farms.

This creates difficulties for the peasant household, particularly when one takes into account the inherent link already pointed out between the process of capital renewal in peasant households and their personal budgets. During years when none of the items of the means of production requires replacement, the peasant household usually sets absolutely nothing aside 'for capital amortization' and consumes the part of the income defined for this purpose by the relations between the market prices. In years when such replacement becomes unavoidable, the scale of the expenditure on renewal is many times greater than the percentage of amortization and represents a substantial and burdensome deduction from the earned income and, therefore, from the consumer budget.

This is why the process of capital renewal is much more difficult for a peasant household than for a large-scale privately-owned enterprise, and why it is, to a considerable degree, more dependent on the availability of credit or the postponement of payments in order to convert renewal at irregular intervals into more evenly spaced annual payments.

Summing up our analysis, we have to regard the process of circulation as normal when it entails a fully completed process of capital renewal at the centre of all economic activity. V. Kossinskii's formula that 'credit is the circulation of capital in an enterprise owned by someone else' has to be supplemented, by pointing out that the success of this circulation depends on the process of capital renewal being fully completed by the end of the economic cycle, and within the period for which the loan was granted; and since the credit is in the form of money, the renewal must have been carried to the stage where this capital can be converted into money.

Up to now we have been discussing ways of maintaining a household's capital in an unchanged condition, by constant renewal. However, a peasant household never remains in an unchanged condition, but is constantly altering its scope, either because of changes in the state of the market or because of changes in the composition of its family. Therefore, in addition to the task of renewing capital, we come up against the problems of expanding it. It should be noted here that the need for such expansion often arises not only because of the organic growth of the family and the household, but because of all kinds of changes in the organization of production techniques.

The transition from manual threshing to the threshing machine, from the use of cattle for manure to their productive use, etc., all these changes make it necessary to improve the way labour is equipped with the means of production; and make it necessary in the case of a market-oriented capitalist farm to improve the organic structure of the capital.

In other words, it becomes necessary to increase the farm's capital not only in relation to the farm taken as a whole, but in relation to every individual unit of the farm's manpower. Such an improvement in the way labour is equipped will itself serve a purpose only when, as a result of this, the family's manpower begins to earn a more abundant livelihood and/or gets a greater opportunity for capital accumulation. This increase in income, as a result of the household becoming more capital-intensive, subsequently makes it possible not only to finance the renewal of the part of the capital which has been freshly created, but also to recoup the original outlay.

These are the considerations that determine the profitability of investing fresh capital sums in the economic turnover. It is perfectly obvious that after an estimate has been made of the profitability of making new capital outlays, the basic question then arises: *where are the funds for this increase to be obtained?*

We must acknowledge that, in this case, the capital increment can be obtained by the same means as outlay on ordinary capital renewal – that is, by a deduction from income. Here, the deduction for growth has to be added to the normal deductions for the renewal of obsolete items of capital. In most cases, the peasant household, particularly in years when the harvest is good, is in a position to make such deductions, sometimes even at the cost of slightly curtailing its consumption. But cases are quite common when the unsatisfied needs of consumption are so acute that they swallow up the entire income earned by the family's labour, leaving no opportunity for deductions from income. In that case the household is left with only one way of enhancing its capital – by using credit.