

THE GEOGRAPHY OF ENCLOSURE IN PRE-REVOLUTIONARY EUROPEAN
RUSSIA - TVER, TULA AND SAMARA PROVINCES

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ABSTRACT

The Stolypin Land Reform passed in 1906 provided for the enclosure of the land of individual peasant households in European Russia. The political, social and legal aspects of the Reform have been studied in detail in the past but little attention has been focused on the actual results the Reform achieved on the ground. It is the author's contention that examination of the results of the Reform is essential if conclusions are to be reached about the significance of the enclosure movement to the changes taking place during the inter-revolutionary period in Russia and to the 1917 Revolution itself. The study of the enclosure movement in Russia is also relevant to the more general discussion among geographers of agrarian change and revolutions.

In the thesis, with reference to three provinces selected from different functional regions of pre-Revolutionary Russia, the pattern of adoption of enclosure is described and an attempt made to explain the patterns. In the first part the number of peasant households that enclosed their land, the method by which enclosure was effected and the resultant type of farming units formed in the sample provinces is investigated and hypotheses explaining the patterns observed tested. It was found that the peasants' response to the Reform varied considerably and that this was due to differences in the socio-economic composition of the peasant class, the level of agricultural technique, the existing spatial organisation of the land and ecological conditions. In the second part the post-enclosure situation is examined, attention being focused in particular on the type of farming system that evolved on the newly formed enclosed farms. It was found that, contrary to the expectations of the authors of the enclosure legislation, the improvements of farming in the way of intensification was not widespread on farms after enclosure. The improvement of farming was found to be dependent more upon the resources possessed by individual peasant farmers than upon the system of tenure and spatial organisation of the land.

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INTRODUCTION

1. The Significance of the Stolypin Land Reform in Early Twentieth Century Russian History

The study of the enclosure movement in Russia during the two decades preceding the Revolution of 1917 is important in relation to the influence the changes - or lack of them - in the lot of the peasant had on the course of history. And in any examination of subsequent developments and of the present day state of agriculture in the Soviet Union, the relevance of pre-Revolution trends is of significant interest.

The enclosure movement did not begin to develop in Russia until the early part of the twentieth century when the Government of Tsar Nicholas II introduced what subsequently has come to be called the Stolypin Land Reform. Under the provisions of an Imperial Edict and Acts passed between 1906 and 1914, the Russian peasant was given the opportunity to withdraw from the rural commune to which he had been bound since the imposition of serfdom in the sixteenth century and to demand that his land be consolidated into a single unit. The Reform, if adopted universally, would have transformed the face of rural Russia and would have effected a major change in the social and economic relationships between peasant households.

What prompted the Government into introducing legislation of potentially such far reaching consequence was primarily fear of peasant revolt in the future. In the revolution of 1905 the peasants had proved themselves to be a force which, if not challenging the monarchy directly, certainly constituted no small threat to the stability of the existing order. The Stolypin Land Reform was the official answer to this threat: it was designed to neutralise discontent in the countryside and to create a contented and politically reliable peasant class. Whether the particular measures introduced were the optimum for achieving this aim is debatable and will be discussed in the chapters following, but it is important to note at this stage that the path thus chosen was by no means an easy one. The Government was, however, optimistic of its chances of success. It was thought that initially

only the economically stronger and more progressive peasant households in the commune would opt to enclose their land (hence the designation of the Reform as the 'Wager on the Strong') but that in time, their example would be followed by the weaker households and enclosure would become a mass movement. It was estimated that the whole process would take twenty years to complete. Subsequent events were to prove that the Government's optimism was not well founded: eleven years after the Land Reform was introduced the majority of peasants allied themselves firmly behind the revolutionary parties thus helping to seal the fate of the Romanov Dynasty.

Like all the reform initiatives taken in the wake of the 1905 revolution, the Stolypin Land Reform has remained to this day a subject of considerable controversy. Interest, predictably, has been focused on the question of whether, had it been allowed to run its full term, the Reform would have achieved its aim. This question is of relevance to the analysis of the inter-revolutionary period in Russia and to the debate surrounding the 1917 Revolution itself. At its very simplest, if it were possible to prove that during the years that it did operate the Reform achieved a reasonable measure of success and thus that its longer term prospects were good, a powerful argument would be provided in support of the view that Russia after 1905 had begun to move along the path of evolutionary change, a process which in all probability would have continued had it not been for the unpropitious outbreak of war in 1914. If, on the other hand, it could be established that the Stolypin policy was an unqualified failure and was doomed to be such from the outset, the counter view, that of Russia after 1905 sliding irreversibly down the path to revolution, would be lent support. Opinion in the West is divided, but it would be true to say that the majority of writers on Stolypin have tended to come down with varying degrees of conviction in favour of the former, more 'optimistic' view of the Reform.

Among the Western scholars, Pavlovsky (1) and Bilimovich (2) give the most generous account of the Stolypin Land Reform. Arguing that the Reform was the product of many years research and active concern for the plight of the peasant, Pavlovsky and Bilimovich maintain that the measures introduced were exactly what were required at the time to solve Russia's serious agrarian problem and, further, that they came within a stone's throw of success. Pavlovsky explains

why this was the case: "At the time of the inauguration of the agrarian reform by Stolypin the Russian countryside was already ripe for individualisation and only awaited the opportunity of breaking away from the bonds imposed by communal tenure and the open field system" (3). The Reform as formulated, he argues, gave the peasants this opportunity and the results, in his judgement, were impressive: the enclosure movement assumed "enormous proportions" and the rural commune "ceased to exist" (4). Other authors, while agreeing that the Reform 'answered the purpose' of the Russian peasant, are more qualified in their assessment of its achievements - actual and potential. Volin, for example, reaches the conclusion that, "if the Stolypin policy of the wager on the strong could have been implemented for a period of several decades it is possible, though by no means certain, that the projected bulwark against an agrarian revolution might well have been created" (5). Even Robinson, who stresses the problems existing in the countryside at the beginning of the century and warns against exaggeration of the "breadth and depth" of the change following 1906, admits that, "..... it is possible that by reason of the economic and legal developments the likelihood of a general uprising of the peasants against the landlords was diminishing" (6).

The 'optimistic' view of the Stolypin Reform has been challenged outside the Soviet Union by Mosse (7) and Owen (8). Both authors are of the opinion that the Reform was strictly a makeshift and ill-conceived measure and as such was incapable of solving the agrarian problem. Mosse argues that "it must appear more than doubtful whether the results achieved would have been significantly different if Stolypin's legislation had operated for twenty years (the) estimate of a hundred years required for the success of the policy might well have proved nearer the mark than the twenty years stipulated by Stolypin" (9).

Soviet historians working within the framework of the general laws of history laid down by Marx, add another dimension to the debate. Obligated to view the period 1905 to 1917 as one of sustained revolutionary crisis, they reject any suggestion that the Stolypin policy was to the advantage of the mass of the peasants. They are united in agreement that the Reform was designed specifically to favour the richest peasants and that its implementation therefore served to widen and deepen further the already existing chasms between

classes in the countryside: the Reform thus contributed, rather than constituted a threat, to the victory of the Bolsheviks in 1917. The official Soviet attitude is best summarised by quoting the words of Dubrovskiy, an authority on the Reform: "..... withdrawal from the commune was only the outward manifestation of the complex processes taking place in the countryside. The change in title to the land and the decay of the commune was the consequence of the increasing development of capitalism in agriculture and the differentiation of the peasant class the development of capitalism at a time when there were still remnants of feudalism in the countryside, the proletarianisation of the peasants, the growth of a class of capitalist peasant farmers together engendered those internal contradictions that led to the strengthening of class conflict in the village" (10).

For the most part, the evidence put forward by the various schools of thought in support of their view of the Stolypin Land Reform has failed to be convincing. Thus the debate has continued unresolved. The main problem, it would appear, lies in the fact that most detailed research has been somewhat narrowly focused on the purely political and legal aspects of the Reform which, in the case of the Western writers, is no doubt partly due to the difficulty of access to suitable sources. Thus analyses have been made of the intentions of the Government in introducing the Reform, the provisions of the legislation passed, the institutions created for carrying out the Reform and their method of operation, and the attitude towards it of the political parties of the day. Put another way, there has been a tendency for writers to examine the Reform from above - to explore what it was designed to achieve and what it might have achieved. What the Reform actually achieved in practice has, by comparison, received little serious attention.

While the value of the work produced on the Stolypin Reform is not to be denied, a different approach - one that examines the Reform more from the standpoint of the peasant farmers themselves - would seem to be called for. It is the present author's view that if any conclusions are to be arrived at of the relevance of the measures passed from 1906 onwards and their immediate impact and long term prospects, it is essential to examine the problems that the measures were designed to solve, to look at the ways in which the peasants responded to these measures and to understand why they responded as they did. The need, therefore, is to analyse in detail the results of the

Stolypin Land Reform during the period that it was in operation and, more importantly, to account for these results.

2. The Results of the Stolypin Land Reform: Measures of its Success

The most accessible yardstick that can be, and has been, used to assess the success of the enclosure movement in European Russia is the number of peasant households that after 1906 enclosed their land. Judging from the official records compiled at the time, the number was in fact not great - under 10% of the total. A considerably greater number, however, was affected by the 1906 and subsequent legislation in other ways: approximately 20% took out, or were deemed to have taken out, title to their land but did not consolidate, while countless others remaining in the commune were affected by partial redistributions of land that fell short of enclosure. Detailed analyses have been made by Robinson, Bilimovich and Dubrovskiy of the official returns relating to all the changes effected under the provisions of the Stolypin legislation, but primary concern here is with the number of actual enclosures that took place.

Where the returns for enclosure are concerned, the most notable feature is that the percentage number of peasant households that had by the outbreak of the war in 1914 enclosed their land varied very markedly from one region of European Russia to another. At one extreme, there were provinces such as Yekaterinoslav, Petrograd, Samara and Taurida in which the enclosure movement, judging from the numbers involved, 'caught on', but at the other there were provinces, including Archangel, Vyatka and Kostroma, in which the movement made little or no headway. Using figures of the number of peasant households that enclosed, authors of the different schools of thought have made claim either for the success or for the failure of the Reform. Those holding the 'optimistic' view of the Reform, concentrate on the former group of provinces in which the enclosure movement seemed to have achieved a considerable measure of success, while the 'pessimists' tend to lay stress more on the latter group. The interpretation of the statistics has thus been highly subjective. In the final analysis, statements as to the relative success of the enclosure movement have rested entirely on the significance attached to particular percentages by different authors.

The number of peasant households that enclosed their land is nevertheless a fairly reliable indication of whether peasant households in different regions of Russia responded favourable or unfavourably to the Stolypin Land Reform. However, it presents only part of the total picture. There are other measures of success or failure, largely ignored in previous work, that must be taken into consideration if any meaningful conclusions are to be reached on the results of the Reform. One such measure is the method by which enclosure was effected.

The 1906 legislation provided that enclosure could take place in one of two ways. Either an individual peasant could withdraw unilaterally from the commune and consolidate his land or, alternatively, a whole commune could come to a decision at the communal assembly (the majority required depended on the type of commune) to disband itself and consolidate the land of all its members. For the sake of simplicity, the former process has been termed 'individual enclosure' and the latter 'communal enclosure'. Although for each household concerned the result was the same, the dominance of one method over the other can be taken as an indication of how the Reform was received by any given group of peasants. Individual enclosure was a minority activity and often, as shall be shown, was effected in the face of bitter opposition on the part of the non-enclosers. It tended, moreover, to be confined to the wealthiest members of the commune. Communal enclosure was by contrast a majority activity and wherever it took place enclosure had, by implication, found popular support. Mosse argues the point: "..... the separation of individual households or small minority groups can be credited as a success for the Stolypin policy only with reservations. It was only where entire village communities reached an amicable agreement to separate that the policy can be said to have achieved its real purpose" (11).

In European Russia as a whole, the majority of enclosed farms that came into being after 1906 were formed as a result of communal enclosure and Yaney (12) has found that there was a clearly discernable trend in favour of this method and away from individual separation, a sign, in his view, of the peasants' acceptance of the "radical Land Reform". Looked at regionally, however, the picture was far more complex, with communal enclosure dominating in some provinces but virtually absent in others. It might reasonably be expected that in those provinces in which the number of peasant households that enclosed

was high, communal enclosure would have been dominant and vice versa for provinces in which the number of peasant households enclosing was low. Comparison of the relevant figures reveals, however, that this was not always the case. In Samara and Yekaterinoslav, to quote but two examples, communal enclosure was considerably less dominant than in the majority of other provinces of Russia although in both the number of households that enclosed was well above average. The existence of such anomalies suggests that the use of the percentage number of peasant households enclosing as a barometer of the peasants' response to the Reform is not altogether satisfactory. At the very least, these anomalies require some explanation.

The physical organisation of the enclosed farms is another feature of the Reform's results that deserves more consideration than it has received in the past. The authors of the 1906 legislation had a very clear vision of the 'model' enclosed farm. This was the khutor, a fully consolidated unit of land on which the proprietor's dwelling and farm buildings were located. On a khutor, it was believed, the peasant farmer would be able to reap the benefits of being in close proximity to his land and, in addition, would be completely independent and thus able to introduce the system of farming most appropriate to the farm's conditions. Data are fragmentary, but it is clear that the majority of enclosed farms formed fell short of the desired model. For reasons that shall be discussed later, it often proved impossible for all a peasant's fields to be consolidated into a single unit or for the farm buildings to be relocated from the existing village on to the land parcel. The result was that on enclosure, instead of creating a dispersed settlement system such as was implied in khutor formation, the old system of nucleated villages was more often than not retained with individual peasant farms consisting of several parts: the dwelling and outbuildings and kitchen garden in the village and one or more (but rarely over four) land parcels at varying distances away. Wherever the main land parcel(s) remained physically separated from the peasant's dwelling, the enclosed farm thus formed was called an otrub. The formation of otrubs in preference to khutors represented something of a failure for the initiators of the Stolypin Reform. The degree of failure (that is how far removed from the model the enclosed farms turned out in practice to be) varied and this must be taken into consideration in any assessment of the Reform's achievements.

Perhaps the most surprising omission in works on the Stolypin Reform is consideration of the effect, if any, that enclosure had on the actual system of peasant farming in Russia. Discussion of this aspect of the Reform's results would seem to be of first importance to the ongoing debate. Even if the most optimistic forecasts of the Government had been fulfilled, with all peasant households in Russia opting to enclose their land, the Reform could in no circumstances be considered successful unless change in title and consolidation of the land were accompanied by an improvement in the economic well-being of the peasants, the low level of which of itself usually demanded that some change be introduced in the existing system of farming. The impression gained from reading contemporary commentaries is that many officials of the day believed that enclosure would inevitably be accompanied by the modernisation of farming. This belief would seem by implication (since it has rarely been discussed) to have been preserved to the present day.

The assumption that enclosure was synonymous with the modernisation of farming is to an extent understandable: initially at least it was the richer peasants who enclosed their land and they were by definition the more successful farmers in the commune and could be expected to be the more progressive. Even if this was the case, however, the question still remains of whether the system of farming on the enclosed farms was or might become more advanced than that on similar farms in the commune.

So far as it has been possible to judge from the evidence available to the author, the improvement of farming was far from being the inevitable corollary of enclosure. Nor for that matter was enclosure, as it was argued at the time and later, a necessary pre-requisite for the improvement of farming. In some provinces of Russia the standard of farming was as high in the commune as on many of the new enclosed farms. Interestingly, in one province studied where the enclosure movement made little headway, in that only a small number of peasant households enclosed, the few enclosed farms were among the most progressive in European Russia, while the opposite was true of another province in which the movement numerically made considerable headway.

3. The Problem and Methods of Investigation

The number of peasant households that enclosed their land, the method by which enclosure was effected, the spatial organisation of the farms formed and the system of farming adopted on the enclosed farms each give some indication of the measure of the success of the Stolypin Land Reform. Taken together, however, they present a complicated and often contradictory picture. Enclosure was a complex process and it is inevitable that it gave rise to complex results. In the present work it is the intention, in the first instance, to describe this complexity and, in the second, and more importantly, to investigate the reasons for it.

The first part of the work is concerned with analysing the development of the enclosure movement in Russia. It attempts to identify the factors that governed the pattern of adoption of the Reform (the number of peasant households that enclosed and the method by which this was effected), as well as to describe the different types of farms thus formed, and to offer an explanation for the observed variations. This, as intimated earlier, requires analysis of the response of the individual peasant households to the Reform - what influenced the peasant farmer in the decision whether or not to enclose, and, if enclosure were adopted, what constraints were imposed.

The second part is concerned with the post-enclosure situation on the peasant farms. It examines the changes attendant on enclosure in the peasant farmer's economy, in the system of farming practised and, to a lesser extent, in the social relationships of the peasants. Further, it suggests reasons for these changes or, as the case may be, the lack of them. Throughout, the situation on the enclosed farms is compared with that on the non-enclosed.

While it is intended that some conclusions be reached about the enclosure movement in European Russia as a whole, only three provinces, which together occupied a small fraction of the total land area, have been investigated in detail. The drawbacks of restricting the investigation in this way are well appreciated. It became apparent, however, as research proceeded and other provinces were also investigated that if all the provinces of Russia were to be considered no account could be taken of the local peculiarities which, as it transpired, had a decisive influence on the course of the enclosure movement, and also

that the resultant work would amount to little more than a restatement of previous, untested, hypotheses. It would have been possible at the other extreme to make a detailed analysis of a single province and this was given serious consideration; the strong argument against this approach is that it would be too specific. So little work has been done on the results of the enclosure movement in Russia and so many general questions remained unanswered that such a study would inevitably stand in a void and would add little to the wider debate on the Reform. The choice of three provinces as opposed to four, five or six is to an extent arbitrary but it was found to be the number which, given the constraints of time and word limitation, best allowed conclusions to be reached both of a general and specific nature. It is the intention of the author to test the conclusions of the present work against a larger sample of provinces in the future.

In selecting the provinces for investigation two major considerations were borne in mind. Firstly, it was considered necessary that the provinces should be drawn from functionally and physically distinct regions of European Russia and, secondly, that they should have registered at least some response to the 1906 legislation. Inevitably, however, choice within these boundaries was restricted by the type and availability of source materials.

The three provinces selected were:

- Tver, lying in the heart of the mixed forest belt, part of what was known as the Central Industrial Region,
- Tula, in the northern black-earth belt in the Central Agricultural Region,
- Samara, in the steppe of the Eastern or Zavolga Agricultural Region (see locational maps; Figures 1 and 2).

The success of the enclosure movement, measured in the terms described above, was found to vary considerably between the three Provinces. This variation, as subsequent chapters will attempt to show, was due primarily to the differences that existed between the Provinces in the level of economic development, the socio-economic structure of the peasant class, physical geography and the existing organisation and structure of the peasant commune.

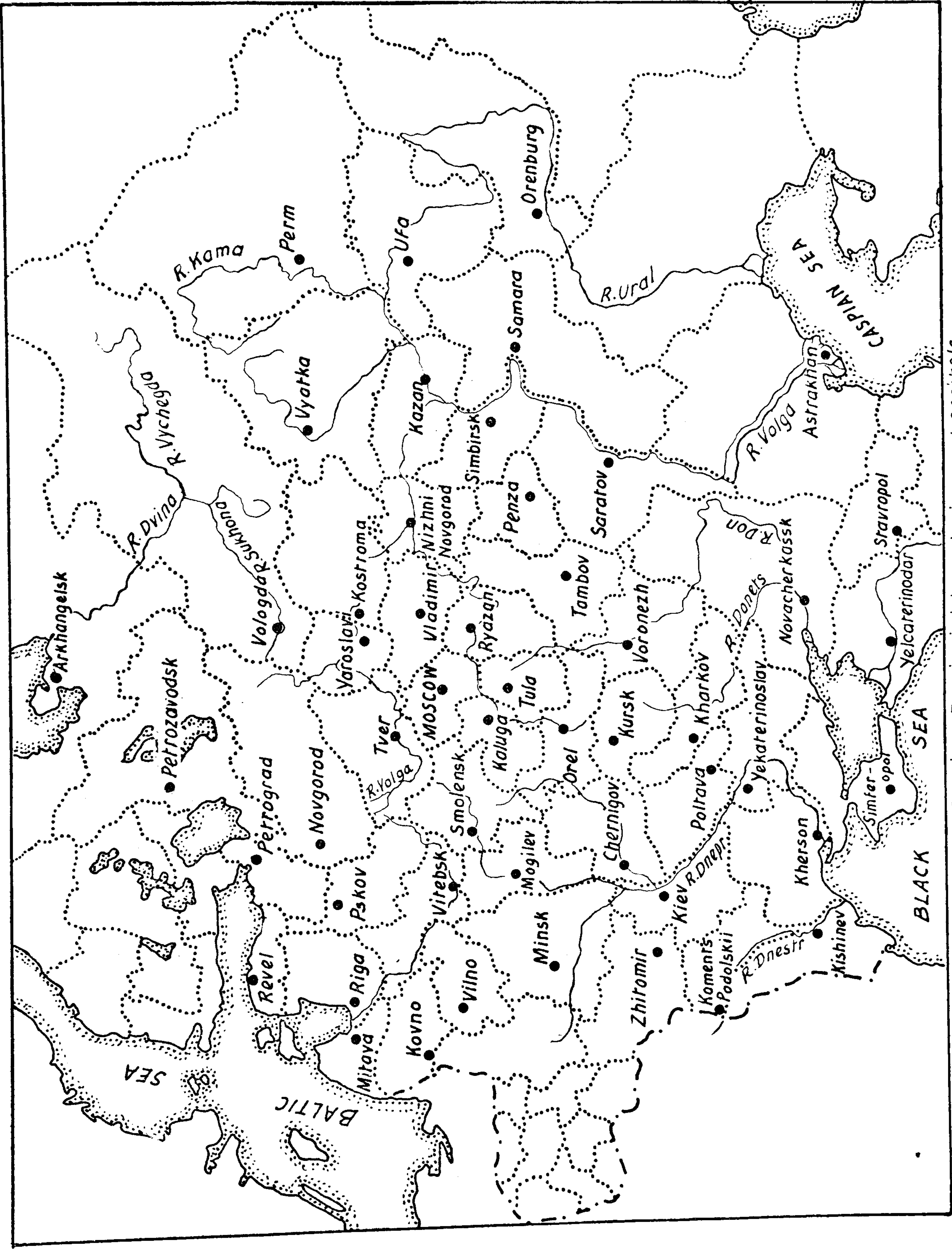


Fig. 1 - Pre-revolutionary European Russia - Provincial boundaries and capitals

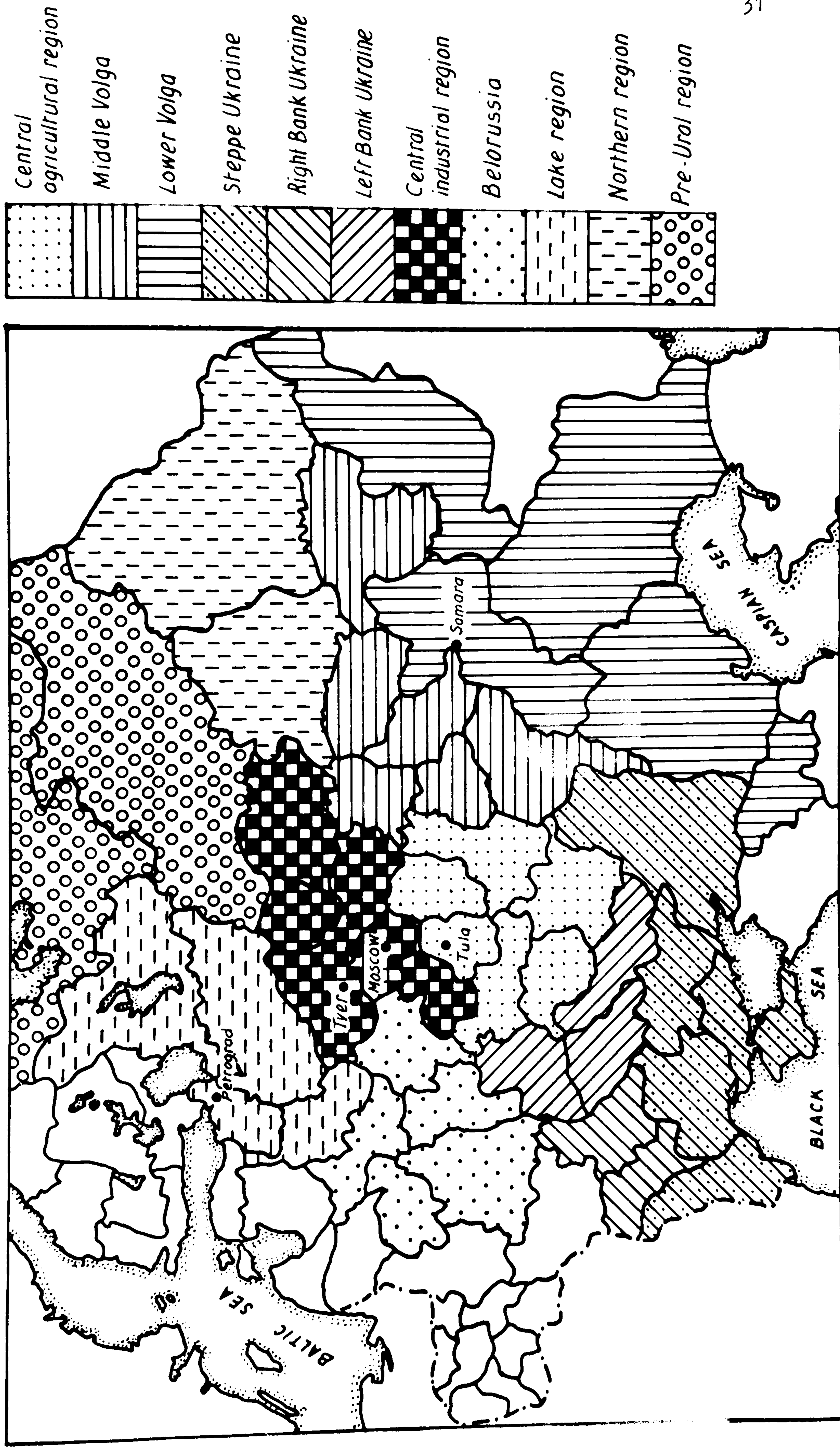


Fig. 2 – Pre-revolutionary European Russia – Principal regions (After Dubrovskiy)

4. Source Materials

Although they are discussed in detail in Appendix I, it is appropriate here to mention the main sources used in the present work and to indicate their uses and limitations. Data relating to the aspects of the Stolypin Land Reform under investigation and of the detail required proved to be fragmentary and it was necessary in the case of each of the three Provinces to draw on widely disparate sources. This in places has made comparisons difficult. Nevertheless, during the course of research, some interesting material was uncovered which to the knowledge of the author has not previously been used.

The sources can be grouped under four main headings: census, archival, cartographic and published reports.

Census Materials:

From the latter decades of the nineteenth century onwards many provincial zemstvos (see glossary) including those of Tver, Tula and Samara, took it upon themselves to conduct surveys of the peasant households within their area of authority. The household censuses - Podvornnye Perepisi - thus produced provide the basic source from which a picture of the peasant economy in each of the Provinces has been reconstructed. There was, however, little standardisation between the Provinces in the type of information collected, its method of presentation and the timing of the enumerations.

By far the most detailed censuses were those compiled by the Tver zemstvo between 1880 and 1914. The information contained in the censuses is tabulated in Appendix I-1. Data were presented for each village in the uyezds surveyed and included the following: the number, size, age and sex structure of the peasant households, the amount of land in use, land use, the distribution by area of crops, the number of farm implements and livestock owned and the number of peasants involved in non-agricultural work. In the later censuses the data are presented not only by village but also, for uyezds, by the size of farm. In addition, some of the later censuses include a section of returns for enclosed farms and this proved to be most useful. As a result, direct comparison of the enclosed and non-enclosed farms for Tver was relatively straightforward.

The household censuses of Tula and Samara Provinces were enumerated in 1899/1900 and 1911, and between 1880 and 1911 respectively

but their coverage of uyezds was less complete than for Tver. The type of information included in them was roughly the same as in the Tver censuses, but varied in detail. The table in Appendix I-1 gives a breakdown for each Province. The most disappointing feature of the Samara and Tula censuses is that they included little or no useful information about the enclosed farms in the Provinces.

An independent survey conducted by Mozzhukhin published under the title of Zemleustroystvo v Bogoroditskom uyezde provided the main source of information on enclosed farms in Tula Province (Appendix I-2). A sample of 163 farms in Bogoroditskiy uyezd in the south of Tula Province was taken and the type of data collected was roughly comparable with that in the 1911 census for the same uyezd. Mozzhukhin does not give any indication of the sampling technique used in his survey and thus the possibility of bias cannot be discounted.

One of the more useful finds made was the census of enclosed farms in Samara Province: Podvornoye i Khutorskoye Khozyaystvo Samarskoy gubernii made by the provincial zemstvo in 1910 (Appendix I-3). The census is unique among those consulted, not so much in the type of information that it recorded, which was less wide ranging than in others, but in the fact that the returns are given for each of the respondents. Further, the survey was concerned not simply with the enclosed farms formed after 1906 but includes returns for those of earlier origin.

The Chief Administration of Land Settlement, the body responsible for implementing the Stolypin Reform, produced several surveys of enclosed farms. The one which proved to be of the greatest use in the present work was Zemleustroyennyye Khozyaystva, a census of a sample of enclosed farms drawn from twelve uyezds in European Russia (Appendix I-4). It is, however, more than certain that the sample was highly biased in favour of the more successful of the enclosed farms.

Archival Materials:

Research conducted over a three month period in the Central State Historical Archive in Leningrad (Ts.G.I.A.L.) proved to be less fruitful than hoped. Nevertheless some interesting manuscripts were consulted, the most useful of which were first, the collection of reports submitted by local Land Settlement Committees to the Chief Administration describing various aspects of work in the Provinces and the problems encountered and secondly, the petitions from individual

peasants to the Ministry of Internal Affairs complaining of injustices committed during the course of enclosure work.

Cartographic Materials:

Cartographic materials were particularly hard to come by. Detailed enclosure maps and plans were found in the archive but unfortunately the author was unable to reproduce them in any way. The plans of enclosed farms and villages that appear in the text were mainly reproduced from contemporary publications. A fortunate find was a book of hand-drawn plans of enclosed villages that accompanied the published census of enclosed farms in Samara Province. These the author was able to copy.

Published Reports:

Published reports provided an important source of information both of a general and specific nature. For information on the rural economy in each of the Provinces prior to the introduction of the Stolypin Reform the reports of the Witte Commission, established in 1902 to investigate the agrarian problem in Russia, proved to be very useful (Appendix I-5). The reports of the zemstvo agricultural departments provided most of the information about new farming techniques being used on peasant farms. Local journals and newspapers were also consulted.

NOTES TO INTRODUCTION

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PART I

PATTERNS OF ADOPTION OF THE STOLYPIN LAND REFORM:

ANALYSIS AND EXPLANATIONS

CHAPTER I

AGRARIAN CRISIS AND REFORM - THE HISTORICAL BACKGROUND TO THE STOLYPIN LAND REFORM

I - 1. The Emancipation of 1861

The roots of the "agrarian crisis" of the late nineteenth century which the Government sought with the Stolypin Land Reform to solve can be traced back to the year 1861. In that year the Russian peasant, after over two centuries of servitude, was granted his freedom under the "Grand Statute of Emancipation" and henceforth ceased to be the property of the noble landowner or crown. The freedom that the peasant was granted was, however, a qualified one. True, he was liberated in the legal sense and, unlike his counterparts in other countries of Europe, was granted an allotment of land to farm, but as the result of a number of provisions in the Statute many aspects of the peasants' life continued to be subject to control and constraint. The peasants, initially greeting the Emancipation Statute with enthusiasm, very soon became disillusioned as the full implications of its provisions became apparent. The Statute of Emancipation created as many problems as it solved; it sowed the seeds of discontent among the peasants which grew as the century progressed.

The principal expectation that the peasants had of Emancipation was that, in accordance with their centuries' old belief that all land should belong to those who toil on it, sizeable portions of the nobles' estates would be transferred into their use. This expectation was not fulfilled for on Emancipation not only were the peasants not granted more land than they previously had tilled under serfdom but were often granted considerably less. Indeed, according to Lyashchenko, the total area of land in the use of the peasants in thirty six provinces for which data are available declined on Emancipation by 18.1% (1). Clearly the landowners were not prepared to grant the peasants more than the minimal amount of land and in this they were backed up by the Government. Further, it was not uncommon in making allocations for the landowners to retain for their own use all the best quality land, leaving the peasants with that of inferior quality, or, alternatively, to fail to

grant land under a particular use, for example woodland or hayland, which was essential to the livelihood of the peasants. In doing this, the landowners were in effect ensuring that the peasants remained economically dependent upon them: with insufficient, poor quality or the 'wrong type' of land, the peasants were forced to lease from their former masters paying in labour or in money. It was for this same reason, to maintain an economic hold over the peasants, that many landowners left their land spatially intermixed with that of the peasants or took otrezki - 'cut offs' - in the middle of the peasants' allotments (in order to gain access to all their fields, the peasants had to pay their former masters). For obvious reasons the rent, whether in money, kind or labour, that the peasants had to pay under such circumstances could be fixed at artificially high levels by the landowners. Such abuses on the part of the landowners gave the peasants justifiable grounds for complaint and strengthened their resolve to wrest at some time in the future the land that they considered to be their own.

The peasants' dissatisfaction in 1861 was further aggravated by the financial provisions of the Emancipation Statute. Rather than being granted it free, the peasants were in fact obliged to pay for their land and the price they had to pay was excessive. Throughout the Empire, the redemption price for land was fixed at a rate far higher than the rental price of land prevailing at the time of Emancipation (2). The imposition of redemption payments meant that peasants everywhere, on gaining their 'freedom', immediately found themselves with a heavy debt to repay to their former landlords. The fiscal burden of redemption payments on top of the normal taxes, direct or indirect, which the peasants had to pay began very early to figure as one of the chief causes of rural destitution and certainly was one of the reasons why peasant farming remained at a very low level of technical development. There were few peasants who were able to make their annual payments to the landowners, the zemstvo and state and also have sufficient money left over to save in order to purchase the machinery, fertilisers, improved seeds and fodder that were so necessary if the productivity of their farming was to rise.

It was principally for the purpose of securing payment of the redemption charges laid on the emancipated serfs that the Government in 1861 preserved with legal guarantees the two basic institutions that

had for centuries past governed the life of the peasants - the household and the commune. Although land was allocated under the provisions of the Emancipation Statute on the basis of the number of revision souls found on each landowner's estate in 1858 (that is the number of males of all ages recorded in the census of that year), it was in practice assigned not to the individuals concerned but rather to the household to which they belonged. All the members of the household regardless of age or sex had the right to share in the common use of the household's land and of the implements and animals necessary for its cultivation and, similarly, all were jointly responsible for the payment of taxes and redemption debts. While this did protect the individual peasant from being thrown out of his home and, in theory at least, ensured that everyone was fed, it had very serious disadvantages for certain individuals. Those peasants, for example, who for part or all of the year went to work in industry or as wage labourers on the estates of the landed nobility were forced to hand over all their earnings to the common pool. If they failed to do so, the head of the household had the right to withdraw the individual's passport - essential to him if he wanted to live for any period of time away from his native village. Understandably, this continued association with the household was a source of irritation to such peasants.

While each household was assigned its due share of land on the basis of the number of its revision souls and had to pay the appropriate sum to the former landowner, the actual ownership of the land and the final responsibility for the payment of the redemption debt lay over most of Russia not with the individual household but rather with the commune of which it was a member. The village commune thus not only survived Emancipation but in fact was strengthened and shored up by it. Since it was the commune that the Government of Stolypin saw as the cause of the 'agrarian crisis' and accordingly sought to destroy with its legislation of 1906, it is necessary to examine what the commune was and the ways in which it influenced the life of the Russian peasants during the latter half of the nineteenth century.

I - 2. The Commune

The commune had a long history in Russia. Probably originating as a loose association of peasants in the period when individual households first came together in northern and central Russia into nucleated villages, the commune during the years of serfdom gradually assumed a number of important functions and, by the eighteenth century had come to govern virtually all aspects of peasant life. The commune as it existed on the eve of the Emancipation Statute could be roughly defined as a self-governing collective association of peasant households joined together by a number of varied and complex legal and land relationships.

The communes that existed prior to Emancipation, although they differed functionally and structurally from place to place, fell into one of two broad categories depending upon their system of tenure: those in which rights in land were held by the peasants in common and those in which rights in land were vested in the individual household. The distinction between those two basic types of commune was preserved after 1861, land being allocated on Emancipation to the peasants either in communal ownership (obschchinnoye zemlevladieniye) or in hereditary household ownership (podvornoye zemlevladieniye). The communes of the latter type were not numerous and were confined largely to the western and south western provinces. Since they did not occur in any number in the Provinces under investigation in the present study they will not be considered here. Instead, attention will be focused on the former type of commune - the obschchina - which formed the basic unit of economic and political organisation for the vast majority of households in Russia both before and after Emancipation. Henceforth 'the commune', unless otherwise stated, will refer to the obschchina.

Peasant farming at the time of Emancipation was based on the use of a number of 'fixed' categories of land: there was the house and garden allotment (the usadba), the arable (pashnya), natural hayland (senokos), natural pastureland (vygon) and woodland and scrub (les and kustarnik). Under the communal form of tenure every peasant household had the right to the use of each of these categories of land occurring within the boundaries of its commune. The distribution and apportionment of the land and the rules and regulations pertaining to its use were, however, laid down by the commune of peasants as a whole. Thus in most, by no means all, communes it was common for the house and

garden allotments to be assigned to individual member households in 'hereditary' ownership (once assigned, neither the size nor location could subsequently be changed), for the arable and natural hayland to be assigned only on a temporary basis and to be subject to redistribution between households if the need arose, and for the natural pastureland, wood and scrubland to be held undivided for common use.

By far the most important function that the commune had to perform where the land was concerned was the periodic repartition of the arable and hayland, the purpose being to maintain some measure of equality of opportunity in terms of the area of land in their use among member households in the face of population changes: if a household increased in size it would become entitled to more land and vice versa if its size decreased. Repartition policies varied widely from one commune to the next. In some the 'unit' for calculating the amount of land to be allotted to each household was the number of its revision souls and in others the number of its consumers (yedoki). The actual size of the land allotment (nadel) pertaining to each unit was determined by dividing the total number of units in the commune into the total amount of land being repartitioned.

There were no hard and fast rules about the frequency of repartitions; in some communes they were made at regular intervals regardless of whether any major changes had taken place in the composition and size of the population whilst in others they took place at irregular intervals - just when the need arose. The type of repartition could also vary. The most radical was the 'basic repartition' (korennoy peredel) where all the field boundaries were destroyed and the number and size of allotments was changed. Redivision by lot (zhereberka) and re-ordering redivisions (pereverstka) were less drastic forms, the size, number and/or location of the allotments remaining the same but entitlement to their use being redistributed among the households. Repartitions did not always have to involve all households in the commune; sometimes partial repartitions could be effected, land exchanges being made between a small number of households. Such partial repartitions generally went under the name of svalka-navalka and took place between the main repartitions, usually being brought about by a sudden change in the size of a household.

Repartition usually involved not only the quantitative redistribution of land between households but also its qualitative redistribution. In many communes land was of very varied quality and it was often necessary for households to be allotted their due share of land in a number of different places. Hence, few peasants in the commune actually had a consolidated unit of land to farm but rather several parcels, often widely dispersed which were intermixed with those of their neighbours. Because their land was spatially intermixed, peasant households in the commune were forced to follow a universal cropping cycle. It was one of the functions of the commune as a whole to decide what this cropping cycle should be and to ensure that all households adhered to it.

In addition to its land administrative functions, the commune also had important fiscal functions to perform - it apportioned the tax burden amongst its member households, broadly in accordance with the extent and quality of the land in occupation, and had ultimate responsibility for the payment of these taxes. After 1861, the commune's responsibilities in this direction were increased with the addition of the redemption debt. In order to ensure that its members did meet their various tax obligations many of the policing functions formerly exercised by the landowners were transferred to the commune on Emancipation. Thus, in cases of default, the commune was able to put a member of the household in question to forced labour or alternatively could remove the head of the household and appoint a different member in his place. In addition, the commune after 1861 assumed the power to deport members to Siberia and, in conjunction with the heads of the household, to grant or withhold permission to obtain and renew the peasants' internal passport.

Such then was the character of the commune which the Tsarist Government sought in 1861 to preserve. Under the provisions of the Statute of Emancipation, the liberated serf was forced, if he accepted his land allotment, to remain a member of his commune and not to accept his land proved in practice to be virtually impossible (3). During the years following Emancipation it was, of course, possible for the peasant to withdraw from the commune with his land if he paid off in full his redemption debt but this was out of the question for the majority for, as has already been shown, the peasants very quickly fell into arrears in the payment of redemption. The commune therefore remained the principal institution governing the life of the Russian peasant during

the half century after Emancipation. At the end of the century, of the twenty five million peasant households in European Russia, twenty million were still bound inextricably to this essentially 'feudal' institution.

I - 3. The Problems of Communal Tenure and Farming 1861 - 1905

The commune: its political and economic significance, provoked considerable controversy among intellectuals both of the left and right during the period leading up to the 1917 Revolution. Some definitely came out in favour of the institution either seeing it as the germ of true collectivism or, alternatively, regarding it as a stabilising influence in the countryside. Others opposed it arguing that it was a moribund institution a 'remnant' of the feudal era and instrument of the Tsarist Government for the suppression of the peasants or that it was a seedbed of revolution. Whatever point of view they subscribed to, few people could, however, deny that there were certain aspects of the communal system of organisation as it then existed that retarded the development of a modern system of farming in Russia and thus that it contributed in part at least to the impoverished position in which the majority of peasants found themselves by the beginning of the twentieth century. Whether the commune can be blamed, as it was by the authors of the Stolypin legislation, for all the problems of the countryside is however debatable.

The principal reason that the peasants gave for the agrarian crisis of the late nineteenth century can be summed up in one word; 'land-hunger' - malozemel'ye. During the forty year period following Emancipation the rural population in Russia increased by nearly one half. Meanwhile the amount of allotment land in the peasants' use remained much the same. Unable to withdraw from their communes, the peasants found that with every new repartition the size of their landholdings, which they had considered on Emancipation to be too small, was reduced (4). Rural overpopulation and land-hunger certainly were the root causes of the rural unrest in the late nineteenth century and it was the quest for more land that was the driving force behind the uprisings of 1905 and the promise of more land that prompted the peasants to lend support to the Bolshevik Party in 1917.

Land-shortage, however, was not the only reason for the demise of the Russian peasant. Robinson has pointed out that the average peasant landholding in Russia in 1877 was 13.2 desyatinas - 35½ acres - which was considerably greater than in most other European countries at that time. In France, for example, the average size of peasant holdings in 1884 was less than 9 acres; "Whatever allowance" Robinson argues, "may be made for the difference between the number of human beings dependant upon the Russian household allotment, and upon the French holding, it appears that by West-European standards the Russian peasant was not badly off insofar as the mere extent of his acres was concerned" (5). The problem was that the Russian peasant did not, and indeed could not, make the most of his land and that this was the case can in part at least be attributed to the conditions of farming in the commune.

Many of the problems associated with farming in the commune stemmed directly from the practice of repartitioning the land between member households. With the increase in the number of rural inhabitants after Emancipation, the peasants' landholdings not only declined in size on every successive repartition but also became progressively more fragmented. By the twentieth century it was not uncommon for some households to hold their land in no less than fifty separate parcels which often were widely dispersed over the open fields. This fragmentation of the land made for very inefficient farming; considerable losses were incurred in time through the need to move from one parcel to another, some parcels were too narrow to allow cross ploughing and some too remote from the peasants' farmstead to be manured or even put to productive use, while much land which otherwise could have been used for crop production was lost in boundary furrows (in central Russia approximately one-seventh of the total arable area). Wastage of land as a result of fragmentation undoubtedly increased the apparent land-hunger of the peasants. In addition, fragmentation of their holdings, as has already been noted, was one of the principal reasons why peasants in most communes were forced to conform to a universal cropping cycle. It was usual in the commune for the arable land to be used at certain times of the year for the communal grazing of livestock and, as a result, it was simply not possible for the individual peasant to plough, plant or harvest his land other than at the prescribed time. Apart from resulting in fragmentation, the practice of repartitioning also meant that peasants in the commune had little feeling of permanence on their land;

there was no incentive for the peasant to improve his fields when he knew that they would probably soon pass out of his use. Overcropping and soil wastage was a particular problem in those communes in which repartitions took place at frequent intervals.

Systems of cultivation in the commune remained primitive. The three-field rotation (trekhpol'ye) of winter grain - spring grain - fallow, was probably in most widespread use in communes by the end of the nineteenth century, although the more primitive long-fallow system (zalezhnaya sistema), whereby the same crop was cultivated for years in succession and land then left to fallow for several years, was still dominant in some provinces on the peripheries of European Russia. While in the past the three-field and long-fallow systems had been able, under conditions of low population density and subsistence economy, to provide for the livelihood of the peasants, by the end of the nineteenth century they had clearly outgrown their usefulness.

Being drawn into the market economy, the peasants now had to produce surpluses from their land as well as producing enough to feed themselves and their dependants. Under the three-field and long-fallow systems, the production of such surpluses was difficult - much land was left unused every year under fallow and output per acre was low. Without making any significant inputs into the land in the form of organic fertilisers or without improving the technique of working the soil, there was no possibility of yields under these extensive systems increasing. Organic fertilisers however were increasingly in short supply in the commune towards the end of the nineteenth century, while the techniques and implements used for working the soil were inefficient and old-fashioned. After Emancipation the peasants continued to use their traditional horse-drawn ploughs and wooden harrows on their allotments and to sow, harvest, winnow and thresh by hand.

Livestock husbandry in the commune also remained at a very primitive stage of development after Emancipation. Livestock were generally kept only to fulfil two functions - first, to pull the peasants' ploughs and, secondly, to meet the requirements of the peasant family in dairy products, meat, clothing, etc. Indeed, conditions being what they were in the commune there was little possibility of livestock farming assuming a commercial character. In the winter, the peasants' animals were usually kept in poor sheds adjacent to their dwellings and fed on small quantities of hay cut from the natural haylands, but far larger quantities of straw and chaff and, in the summer, they were left to roam

on the natural pastureland of the commons (which by the twentieth century were usually very overstocked and poorly cared for) or on the fallow or stubble of the open fields. The mixing of all the peasant animals together in a common herd during the summer created conditions ripe for the rapid spread of infections and prevented controlled breeding.

There can be little doubt that the system of farming practised in most communes of European Russia by the turn of the nineteenth century was little different from what it had been at the time of Emancipation. The productivity of peasant farms therefore remained low. It is true that a trend towards intensification did begin to develop in the countryside as the century progressed - here and there multiple-field rotations replaced the traditional systems, specialised branches of farming were developed and new machinery and techniques introduced. These changes, however, affected only a minority of the peasants. The majority, normally had neither the means nor the know-how to change the established system of farming and, even if they had, many aspects of the communal form of organisation often stood in the way. In order, therefore to satisfy the basic subsistence requirements of a growing population and to produce surpluses for sale, most peasants attempted to extend the area of land in their use. Some peasants were able to purchase land, but most could only afford to rent (6). Increasing competition however drove land rents progressively higher and, understandably, the peasants in an attempt to cover costs, extracted the last possible ounce of produce out of their rented land. The 'economy of devastation' that developed seriously damaged the land for the future. The peasants in the commune also attempted to raise the level of grain production by expanding the area of their arable at the expense of other 'categories' of land. The resultant contraction in the area of hay and pastureland was inevitably accompanied by a decline in the number of peasant livestock; hence the decline in the amount of organic fertiliser available for use on the arable.

Principally as a result of renting land and extending the arable, there was an increase in the volume of grain produced in peasant communes during the half century following Emancipation but this increase did not keep pace with the increase in rural population. In years of good harvest, most households could produce sufficient to meet their basic subsistence requirements and, sometimes have some left over to sell on the market. In years of poor harvest, however, the peasants

were faced with disaster; they were forced to reduce their intake of food and to liquidate what little capital they possessed. By the end of the nineteenth century after a series of harvest failures, the most serious being in 1891, the position of the peasants was critical. Completely impoverished, short of capital and with serious tax arrears, the peasants eyed jealously the land of the nobility. With the dawning of the twentieth century, the peasants' latent discontent gradually began to be translated into positive action. During the five years ending with 1904 there were in European Russia several hundred isolated instances of agrarian disturbance ranging from protest demonstrations and seizure of grain from the nobles' estates to fatal assaults on the landlords and the burning of buildings. Then, in 1905, with the outbreak of revolution in the cities following the unpopular and unsuccessful war with Japan, these disturbances escalated. During the months from February to September, peasant uprisings spread through approximately one-sixth of all the uyezds in European Russia.

I - 4. The Official Answer to the Agrarian Problem: the Stolypin Land Reform 1906 - 1911

Although the most serious attempts to solve the agrarian crisis came in the aftermath of the 1905 uprisings, the Government of Tsar Nicholas II had previously been alive to the growing impoverishment of the peasants in the countryside, and, during the latter two decades of the nineteenth century, various attempts were in fact made to relieve peasant distress. In 1883, the Peasant Land Bank was formed which set up machinery for the sale of nobles' and crown land to the peasants and, in 1893, legislation was passed limiting the frequency of repartitions of communal land to once in every twelve years. Neither measure met with any marked degree of success. Because of high interest rates, most land sold by the Peasant Land Bank passed into the hands of the rich peasants rather than into those of the needy, and the 1893 repartition rule, was often ignored. More important than these measures were the fiscal reforms introduced by the Government which helped to reduce the tax burden of the peasants. In 1881, redemption payments were reduced by decree (in November 1905 they were halved and in January 1907 cancelled altogether), in 1886 the poll tax, levied since 1719,

was repealed and in 1900 it was laid down that zemstvo taxation should not increase by more than 3% per annum.

These reforms did little more than scratch the surface of the problem in the countryside. The uprisings of 1905 showed the Government that far more radical reforms were needed, reforms that would strike at the very heart of the problem - at the causes of peasant poverty. The principal cause of peasant poverty so the Government decided was not, as the peasants argued, land-hunger but rather the continued existence in the countryside of the commune. The legislation passed in 1906, 1910 and 1911, under the direction of Premier Stolypin, therefore attempted to destroy the commune.

The major provisions included in the Stolypin legislation are summarised below (7). The Act of 9th November, 1906, gave to every head of a peasant household in communes which had had no general repartition for twenty four years the right to become the legal and hereditary owner of all the land in his possession in 1906 and, if he so desired, to demand that his land be consolidated into a single parcel. In those communes in which repartitions had taken place within the last twenty four years, the peasant housholder was entitled only to his due share of land, i.e. the amount to which he was entitled according to the number of revision souls or consumers in the household, but any held in excess could be purchased by him from the commune at the average price of land fixed in 1861. Again, such households were entitled to ask that their land be consolidated in a single parcel. It was recognised, however, that often when an individual household decided to withdraw from the commune, the consolidation of his land might prove to be impossible. In such cases the commune had to compensate financially the household concerned. The Act of 9th November provided not only for the withdrawal of individual households from the commune but for whole communes to vote for their own dissolution and for the enclosure of the land of each member household. Such required the agreement of two thirds of the member households. It was also possible under the provisions of the Act for those communes which held several separate parcels of land intermixed with that of other communes, or which shared some land in common with other communes, to have their land consolidated into one parcel surrounding the village. This process did not involve any change in title to the land.

The Act of 14th June, 1910 carried the legislation further. Under the provision of this Act it was laid down that households in all those communes which had had no repartition since January 1st, 1887 were automatically to become hereditary owners of their land. The Act of May 19th, 1911 stated that the transfer of title to the land from communal to hereditary ownership could take place only if simultaneously accompanied by consolidation.

The three Acts therefore provided for a number of changes to be effected in the commune which related both to the tenure of the peasants' land and to the spatial organisation of their land. It is necessary to distinguish between the different processes made possible by the Acts.

First, it was possible under the provisions of the Acts for either individual peasant households or whole communes to change the title to the land and transfer it into hereditary ownership (ukrepleniye v lichnoy sobstvennosti). It is important to note that it was the head of the peasant household and not the household as a collective unit that thus became the owner of the land. Until 1911, the transfer of title to the land could be a 'one-off' process and did not have to be accompanied by the spatial reorganisation of land.

Secondly, it was possible, once it had been taken into hereditary ownership, for land of individual peasant households to be consolidated into a single parcel (uchastkovoye zemleustroystvo). After 1911, consolidation became a necessary condition of the change in title to the land.

Thirdly, it was possible under the provisions of the Acts for the land of a whole village to be consolidated into a single parcel (gruppovoye zemleustroystvo). Such "group enclosure" or Group Land Settlement did not involve any change in title to the land nor did it affect the way in which the land of individual peasant households was organised spatially within the commune. It was possible for the land of a village to be consolidated - clearly demarcated off as a single unit from that of other villages and landowners - but for individual peasants' land to remain in communal ownership and unenclosed. Often the consolidation of a village's land was the first, and as shall be shown, necessary step towards the consolidation of the land of individual peasants whether by individual or communal enclosure.

The actual task of putting into effect the provisions included in the legislation of 1906, 1910 and 1911 fell to the Chief Administration for Land Settlement and Agriculture (Glavnoye Upravleniye Zemleustroystva i Zemledeliya - G.U.Z.i.Z) which had been formed out of the old Ministry of State Domains in May 1905. In March 1906 a new body within the Chief Administration for Land Settlement was formed - the Central Committee for Land Settlement - the function of which was to make major decisions about the carrying out of the Reform. At the local level, Land Settlement Committees were established in most provinces and uyezds of European Russia. According to instructions in 1906, these latter bodies were simply to co-operate in the reallocation of land when requested to do so by the peasants. In effect their powers were considerable, especially after 1911 when they became responsible for the execution of all enclosure work in their region and were thus able to intervene even when they had not been asked to do so by the peasants. In addition to the Land Settlement Committees, the Government also used the Peasant Land Bank to promote enclosure in the countryside. From 1906 onwards, the Bank bought up estates from the nobility or crown and divided them into individual farming units for sale to the peasants. Henceforth, it was decided preference was to be accorded in the sale of land not to peasant communes and co-operatives as had been common in the past but to individual households.

A final and very important aspect of the measures introduced after 1906 was that the Government undertook to assist financially, with interest free loans and grants, those peasant households and communes which decided to adopt the Reform and employed 'farm-advisers' whose task it was to familiarise the peasants on their new farm units with modern farming, methods and techniques. On the whole, however, assistance of what ever kind to the peasants after enclosure was rather limited. Little more than 4% of the total State budget was directed to the Chief Administration for Land Settlement and Agriculture in any year between 1906 and 1914 and much of this was absorbed in the payment of salaries to all the personnel involved in administering the Stolypin Reform.

I - 5. The Pattern of Adoption of the Stolypin Land Reform

S.M. Dubrovskiy (8) has worked extensively on the records of the Chief Administration for Land Settlement and his calculations of the results of the Stolypin Land Reform are likely to be as accurate as

any. Appendix II contains summaries of the tables he produced.

Official statistics show that 1st January 1916 nearly two and a half million peasant households in Russia (c.22% of the total) had taken out title to their land. These included two million households which withdrew from the commune under the provisions of the 1906 Act and half a million which under the 14th June 1910 Act were deemed to have automatically transferred from communal to hereditary ownership. The rate of withdrawal from the commune varied, the years immediately after the passing of the 1906 Act being characterised by a particularly strong movement followed by a decline to the war years. Of the households that withdrew legally from the commune, Dubrovskiy calculates, only just over one million had by 1st January 1915 consolidated, approximately two-thirds as a result of 'communal enclosure'. The rate of enclosure increased steadily each year between 1906 and 1911 but thereafter there was a levelling off:

Table 1

Changes in Tenure and Enclosure in European Russia 1906 - 1915

Year	Total number of households taking title to their land*	Total number of households that enclosed**
1907	48,271	8,315
1908	508,344	42,350
1909	579,409	119,380
1910	342,245	151,814
1911	145,567	206,723
1912	122,314	122,522
1913	134,554	192,988
1914	97,877	203,915
1915	29,851	No Data
Total	2,008,432	1,048,007

* Dubrovskiy ... op.cit., p.200 (These figures do not include the households which under the 1910 Act were deemed to have taken out title to their land)

** Ibid., p.244

In addition to those formed as a result of the consolidation of former communally owned land, approximately 275 thousand enclosed farms were created and sold to the peasants by the Peasant Land Bank. Group Land Settlement work - "group enclosure" - turned out to be an important activity of the Land Settlement Committee. Nearly half of all the projects completed between 1907 and 1914 were of this type.

Table 2

The Results of the Stolypin Land Reform Summarised*

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* From Dubrovskiy .. op.cit., p.p.244 and 588 - 591.

The variation by region in the results of the Stolypin Land Reform is shown cartographically in the pages following. A number of points should be noted. First, (Figure 3) the percentage number of all peasant households that enclosed was not uniform. The largest numbers were found in the southern and eastern provinces and in the provinces on the western borderlands, stretching in a broad belt from St. Petersburg to the Ukraine. In the provinces lying in the heart of the coniferous forest and the southern and eastern fringes the number was negligible, while in few of the provinces in the centre of European Russia did enclosed farms exceed 10% of the total. Secondly, (Figures 4 and 5) communal enclosure was most dominant in the area extending from the

north east to south west of European Russia and least in the provinces of the west bank of the River Volga in the eastern provinces of the northern and central black-earth belt. Thirdly, (Figure 6) enclosed farms formed on the land of the Peasant Land Bank were found everywhere in European Russia but they were relatively most numerous in the northern and central black-earth belt and the eastern and southern steppe. Finally, (Figures 7 and 8) Group Land Settlement projects constituted a large proportion of all the work completed by the Land Settlement Committee in the provinces of the mixed forest belt, northern and central black-earth belt, middle Volga and the north but was considerably less important elsewhere. The chapters following will attempt to provide some explanation for these variations.

NOTES TO CHAPTER I

1. Lyashchenko, P.I., History of the National Economy of Russia to the 1917 Revolution. New York, 1949. For an analysis of the land allocations made on Emancipation see p.p.384 - 393. Lyashchenko found that the decline in the area of land in peasant use was particularly great in the fertile black-earth provinces where landowners had begun to develop their estates along 'modern capitalist' lines producing crops for sale on the expanding European markets. Here the peasants lost 26.2% of the land they previously had tilled in otrezki - cut offs - made by the landowners. In the less fertile provinces of the non-black-earth belt where landowners relied less than in the south on farm profits as a source of income, the peasants were deprived of some 9.9% of the land they previously had used.
2. In the black-earth provinces the redemption cost for all the land allotted to the peasants in 1861 amounted to 341 million rubles, while the actual value of the same land at current prices was only 284 million rubles, a difference of 57 million rubles. In the non-black-earth provinces the redemption cost was 340 million rubles as against an actual value of 180 million, a difference of 160 million rubles. For an explanation for the relatively higher

redemption payments demanded of the peasants in the non-black-earth provinces compared with the black-earth, see Seaton-Watson, H., The Decline of the Russian Empire, O.U.P., 1968, p.p.43-45.

3. Robinson, op.cit., includes a discussion of the ways in which the peasants were forced under the Emancipation Statute to accept their allotments and hence remain in the commune, p.p.75 - 76.
4. The average size of one allotment (nadel) in 1861 was 5.1 desyatinas. By 1900 it was 2.7 desyatinas.
5. Robinson, op.cit., p.97.
6. By the end of the nineteenth century one third of all peasant households in Russia rented land and this constituted one sixth of the total land in peasant use.
7. For a detailed description of the legislation of 1906, 1910 and 1911 see Robinson, op.cit., Ch. XI, "The Wager on the Strong".
8. Dubrovskiy, op.cit., Chs. 4, 5 and 6.

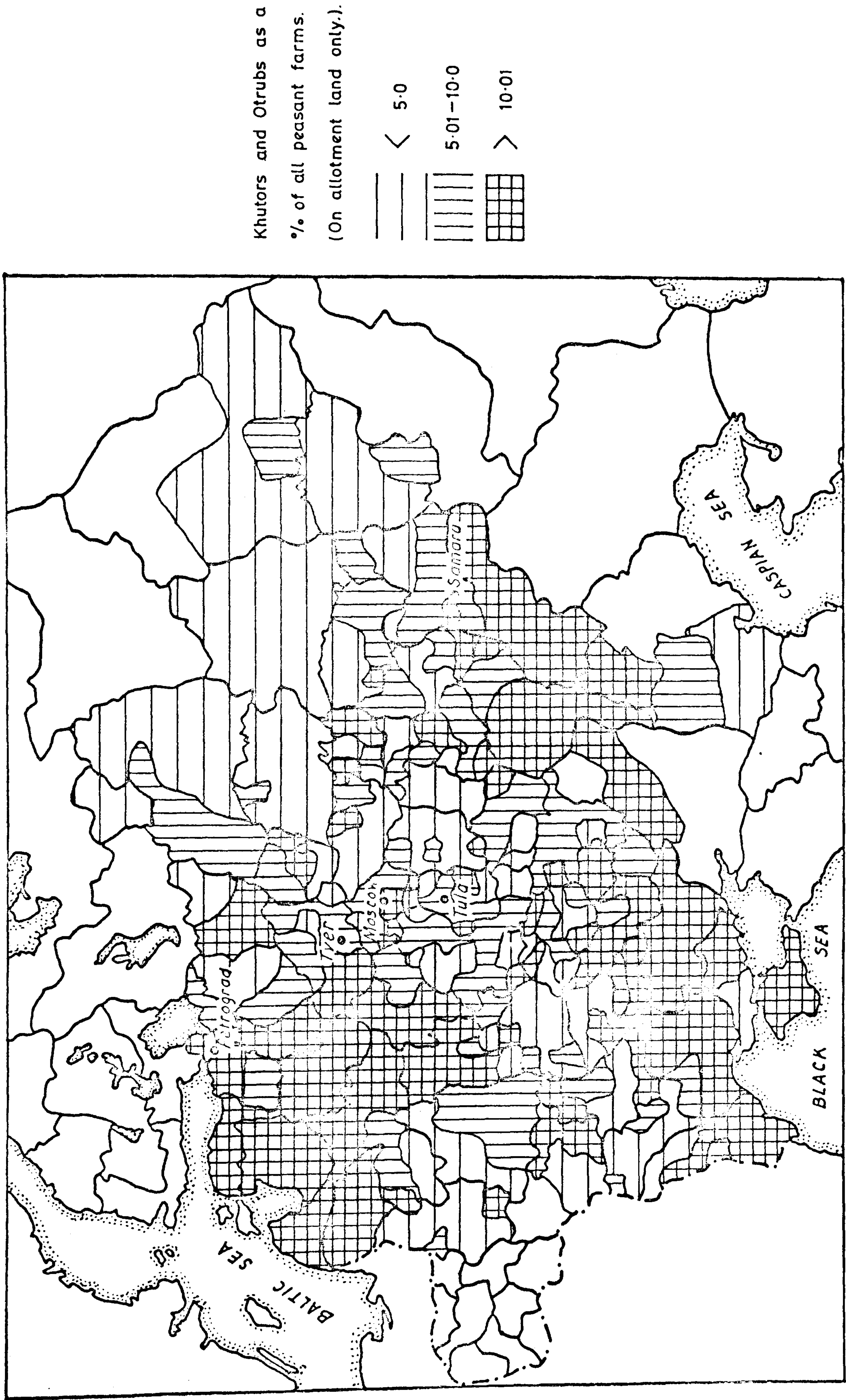


Fig. 3 Number of enclosed farms in European Russia by Provinces. [after Pershin, (1966), p. 100]

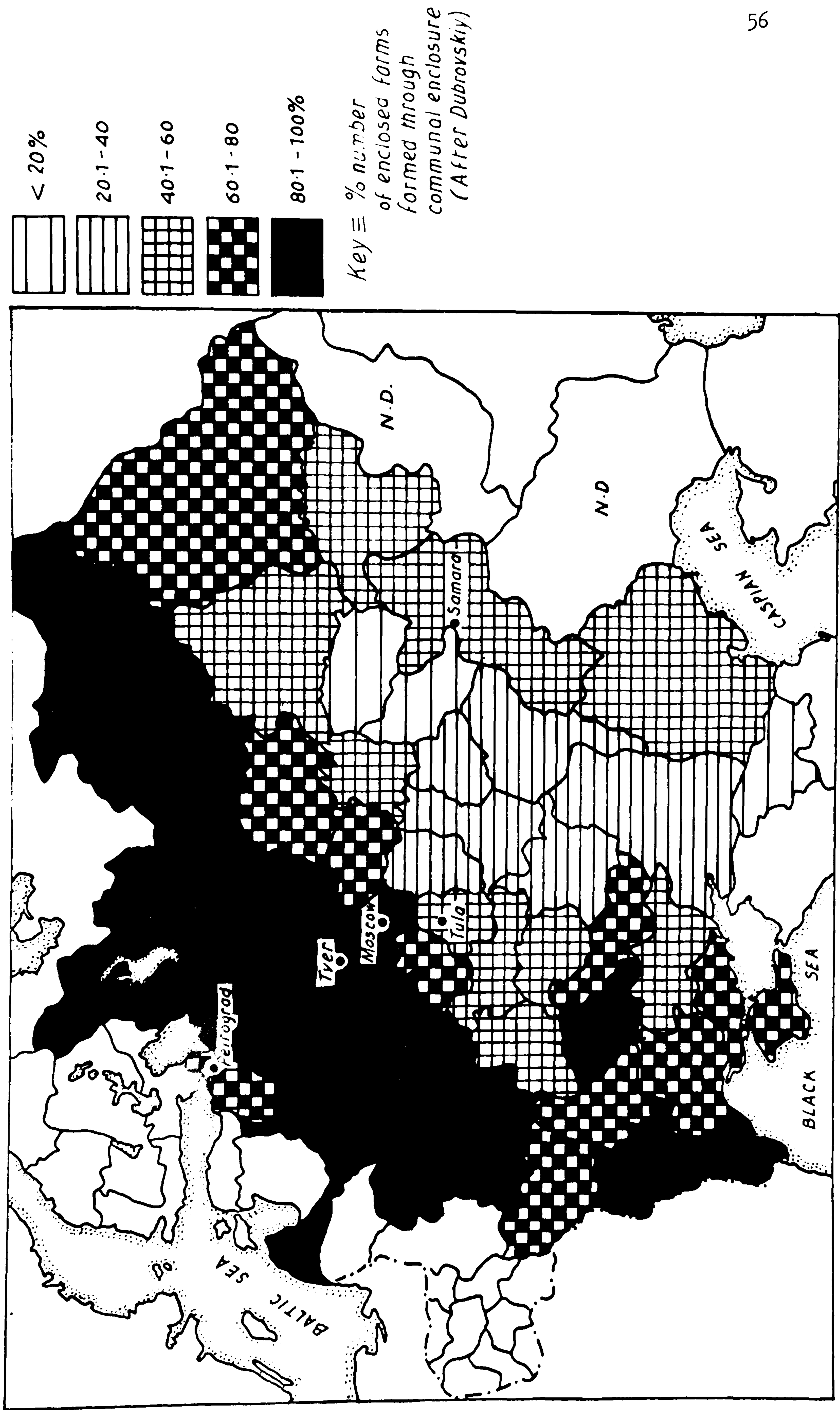


Fig. 4 - Communal enclosure on peasant allotment land in European Russia 1906 - 1st Jan 1916

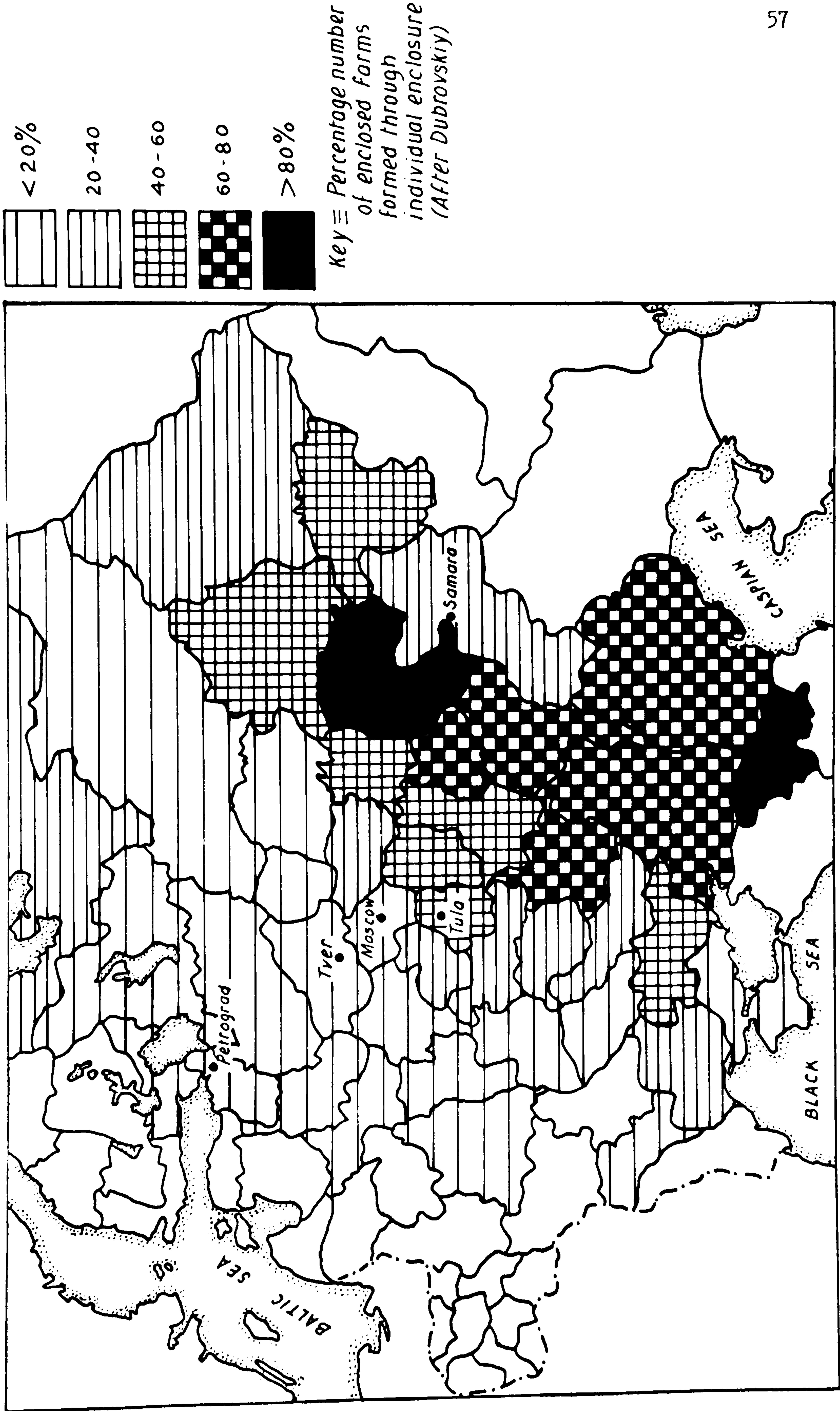


Fig. 5 - Individual enclosure on peasant allotment land in European Russia 1906 - 1st Jan. 1916

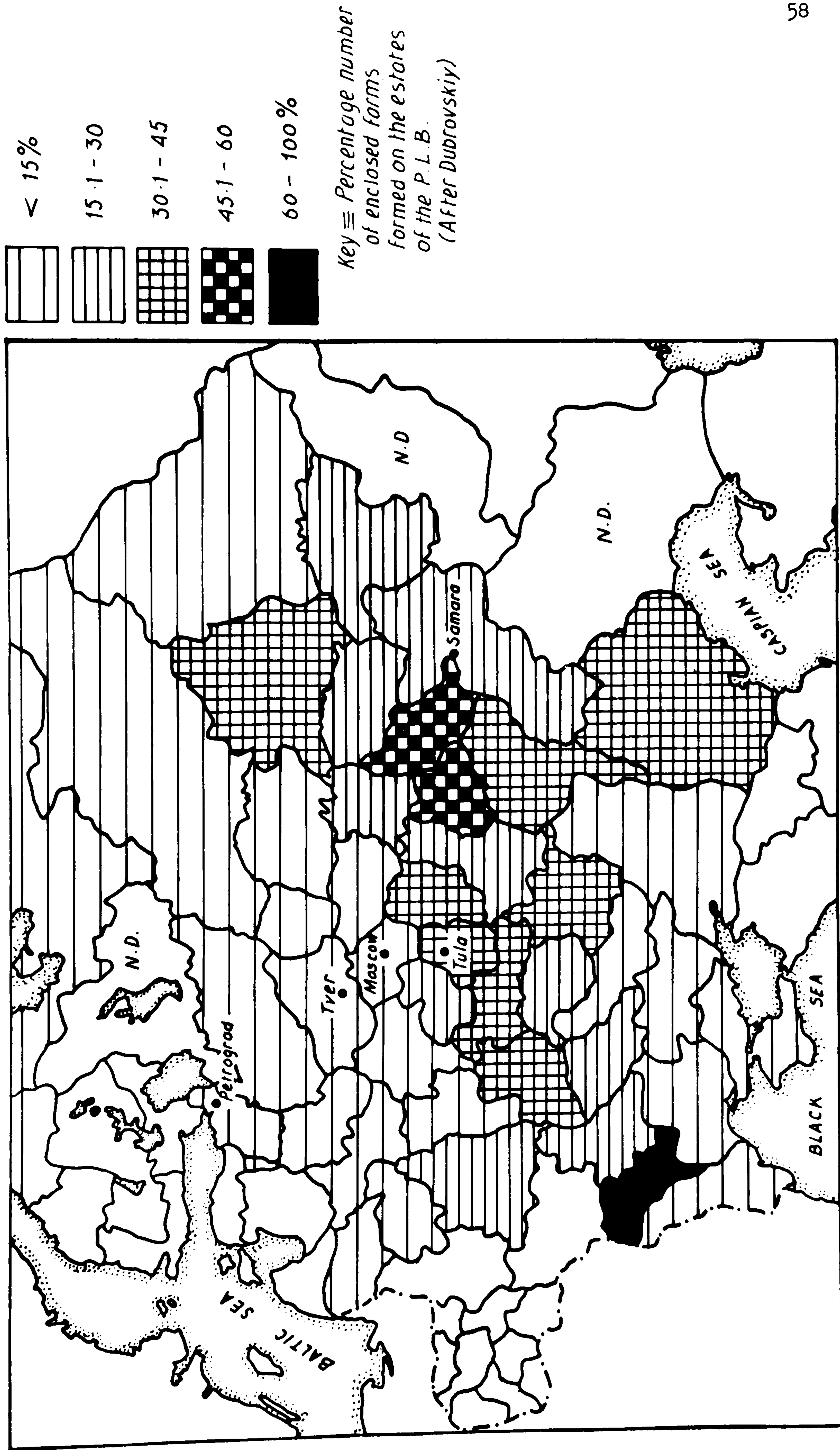


Fig. 6 — Enclosed forms formed on the estates of the Peasant Land Bank 1906 — 1st Jan. 1916

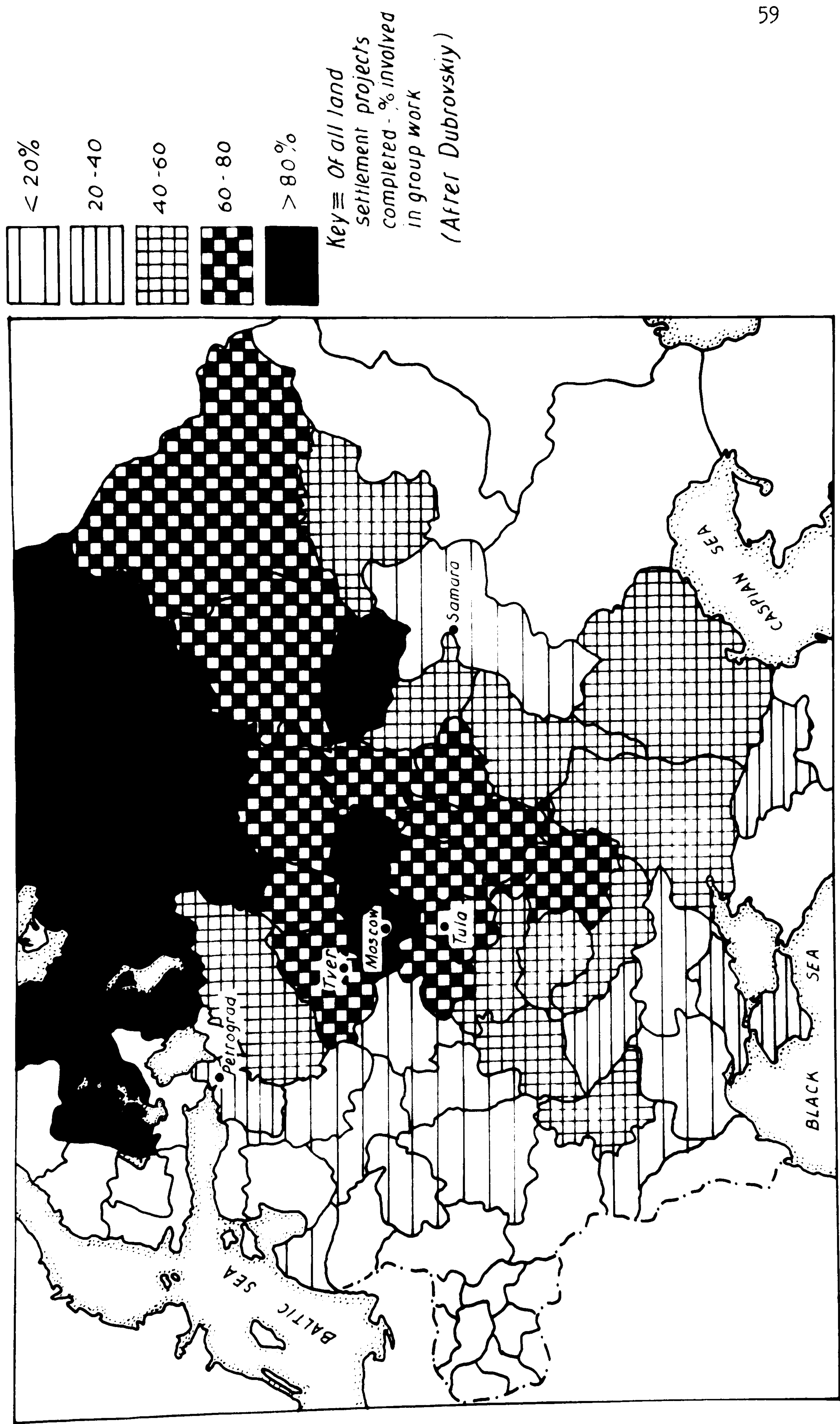


Fig. 7 - Group land settlement in European Russia 1907 - 1914

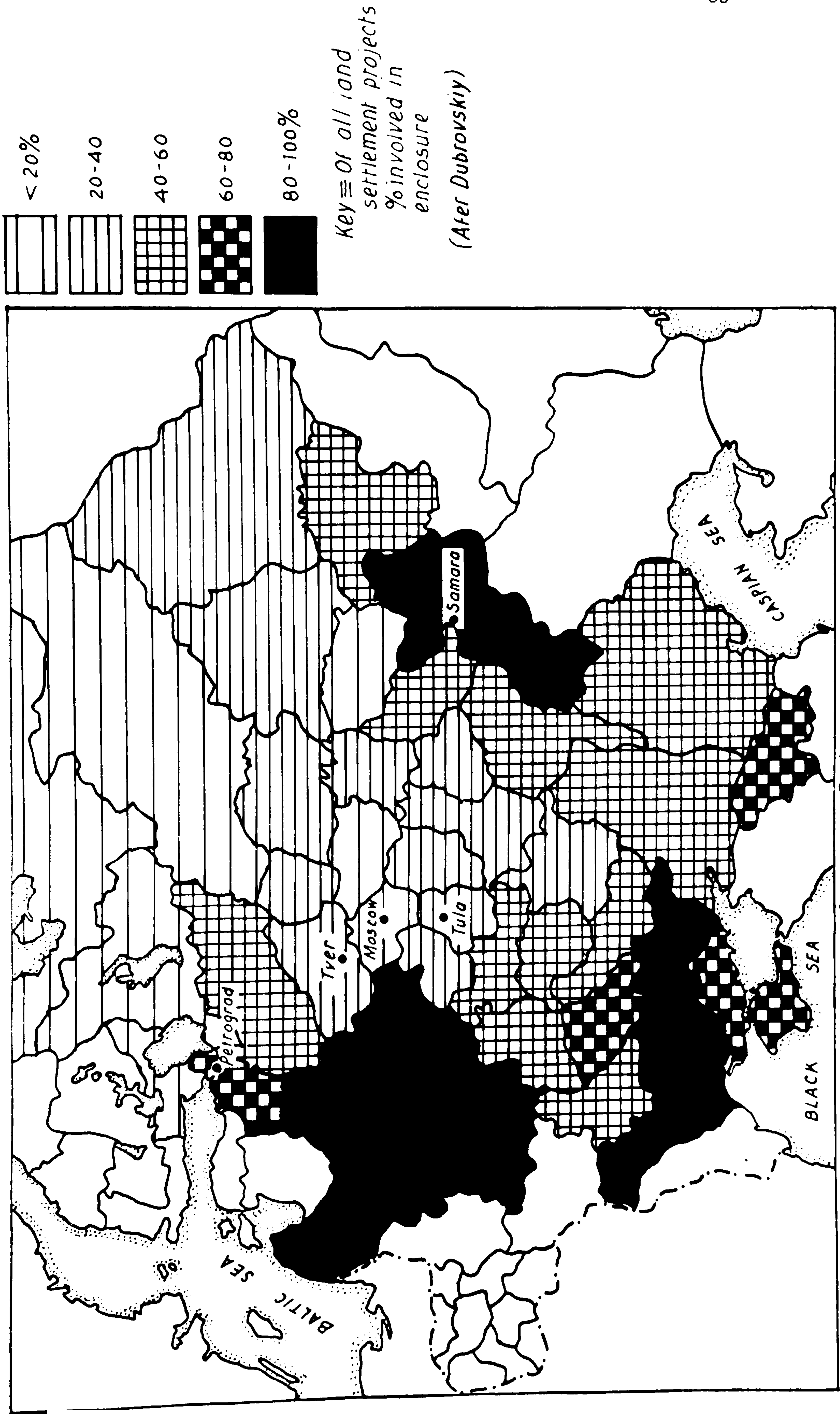


Fig.8 ≡ Enclosure as a share of all Land Settlement Projects 1907-1914

CHAPTER II

THE CONDITION OF PEASANT FARMING AND THE PEASANT ECONOMY IN TVER, TULA AND SAMARA PROVINCES IN THE LATE NINETEENTH AND EARLY TWENTIETH CENTURIES - THE NEED FOR REFORM

The need for agrarian reform was universal in European Russia by the beginning of the twentieth century. The urgency of this need and the particular problems that required solution, however, varied from one region to another. By describing in detail conditions on the eve of the Stolypin Land Reform in just three provinces of European Russia it is possible to give some indication of the variation in the magnitude and the complexity of the problems that the legislators of 1906 sought to solve in the space of a mere twenty years with three relatively simple acts.

It is not the intention to present a thorough description of the economic and physical geography of the three Provinces; only those aspects which have a direct bearing on the problem at hand will be discussed. The reader is thus referred to the standard texts given at the end of the chapter if further information is required (1). Administrative maps of the three provinces are given in Figures 9, 10 and 11 overleaf.

II - 1. The Spatial Organisation of Peasant Land in Tver, Tula and Samara

One of the principal obstacles to the modernisation of farming in the nineteenth century Russian countryside that was a direct consequence of communal tenure was the complicated spatial organisation of peasant land (p. 44). In virtually all provinces of European Russia - and Tver, Tula and Samara were no exception - communes were found which either shared some of their land in common or which held their land not in one but in a number of separate, often widely dispersed, parcels while at the level of the peasant household it was usual for individual land allotments to be highly fragmented. For a number of reasons, however, the degree of complexity of the spatial organisation

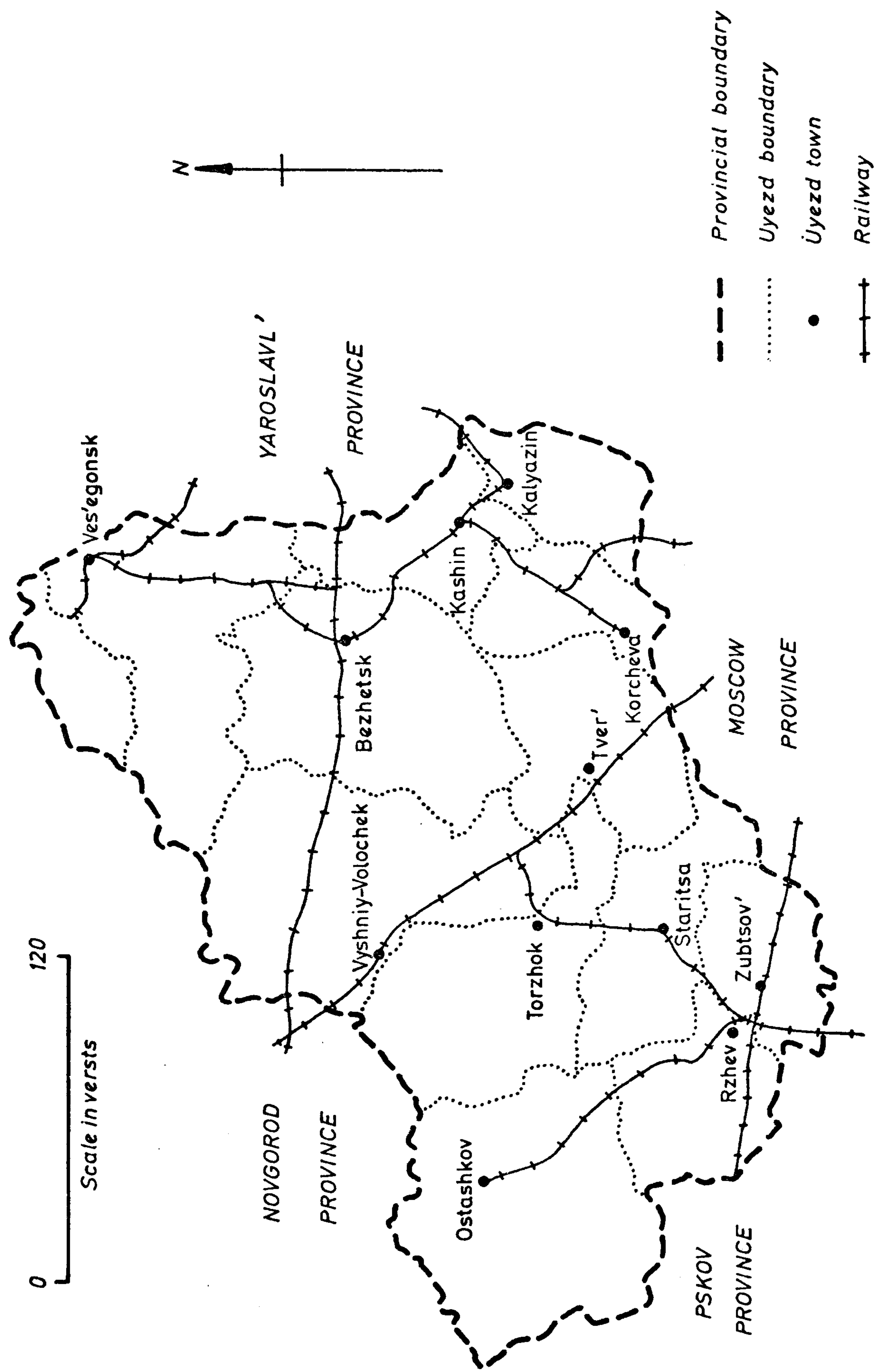


Fig. 9 Administrative map of Tver Province

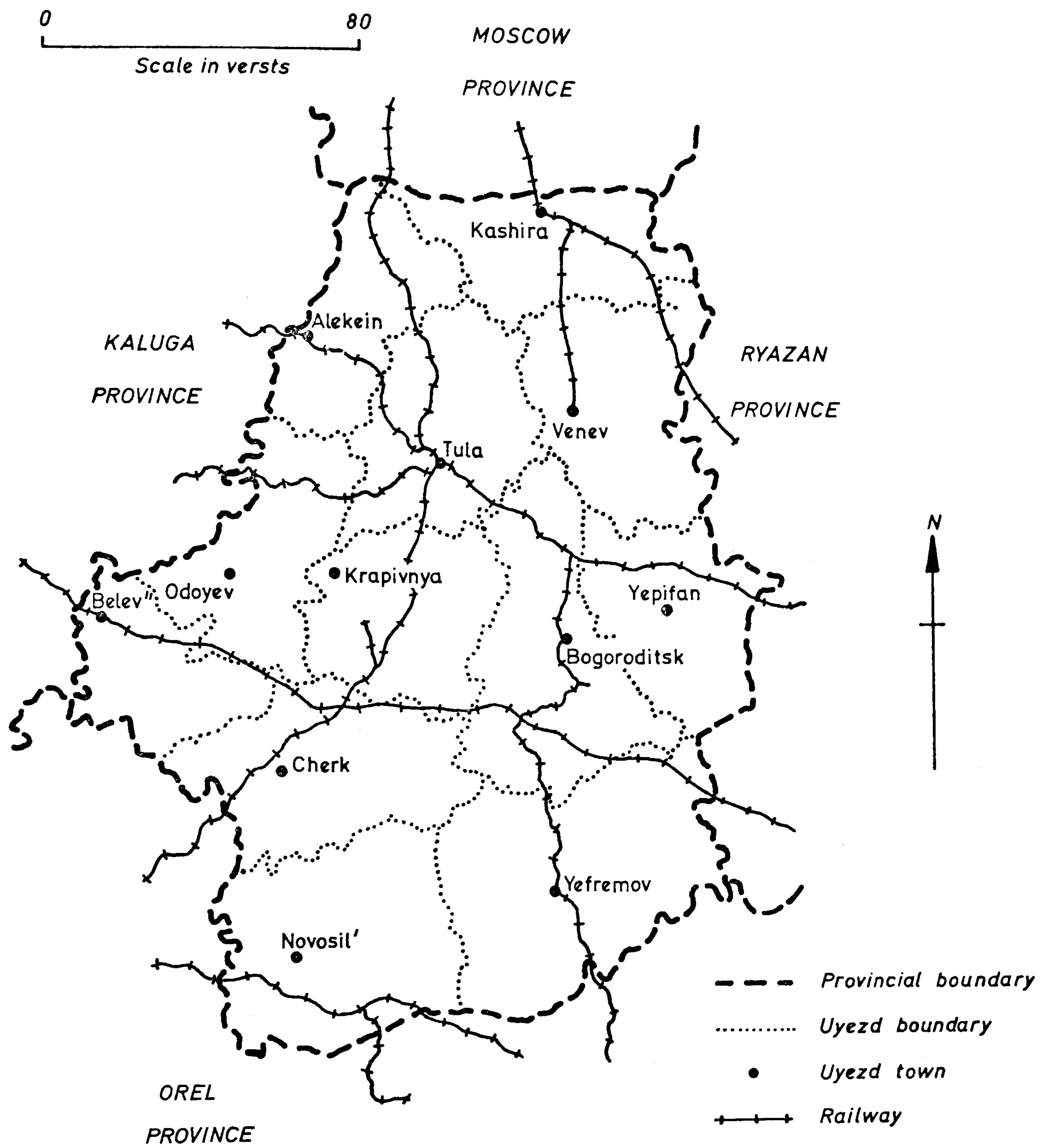
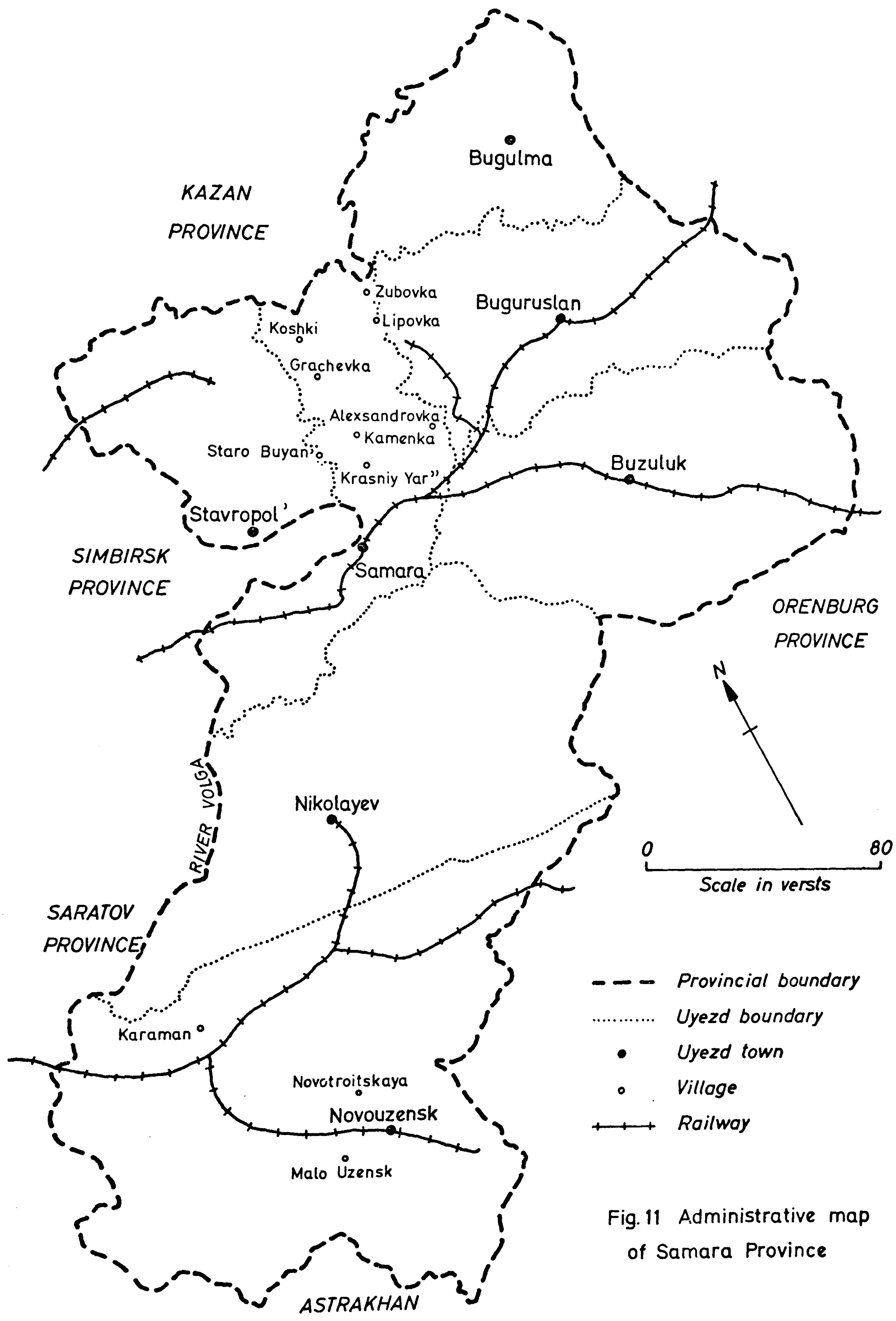


Fig. 10 Administrative map of Tula Province



of peasant land, both at the commune and individual household levels, was different in the three Provinces under investigation.

II - 1a. The Fragmentation of Commune Land in the Three Provinces

On the eve of the 1906 Reform the distribution of the land of peasant communes in the three Provinces had remained virtually unchanged since the time of the General Survey in Russia. Thus in 1906, as it had been for decades past, peasant land was distributed in a number of separate parcels intermixed spatially with that of other landowners. The fragmentation of communal land was most widespread in the 'noble strongholds' of Russia, in the provinces of the mixed forest belt and northern black-earth belt, of which Tver and Tula are examples, and least widespread in the provinces of the 'pioneer regions' in the east and south of European Russia, such as Samara, where the nobility had never gained a strong foothold.

The most detailed data relating to the fragmentation of communes are available for Tver Province. In 1911/1913, Table 3 below shows, approximately half the communes in the Province held their land in two or more separate parcels of which a number, although a minority, held it in six or more. These land parcels were usually located at a considerable distance from one another; in nearly two-thirds of the cases at more than 5 versts.

Table 3

The Fragmentation of Commune Land - Tver Province, 1911 - 1913 (1)

Number of separate land parcels	1	2	3-5	6-9	>10	>1
% number of communes	50.5	22.0	20.9	5.5	1.1	49.5
Distance in <u>versts</u> of furthest						
land parcel from village	2-5	5-10	10-15	15-20	20-30	30-40
% number of communes	36.5	38.2	14.3	4.6	5.8	0.6

Changes taking place at the time of Emancipation complicated the already complex land relationships in Tver Province. In 1861, for reasons already discussed (p. 38), it was not unusual for the landowning nobility to take substantial portions of land from communes, the otrezki, so as to cause the maximum degree of inconvenience to the peasants. Many peasant communes emerged after Emancipation to find large areas of nobles' land intruding into the middle of their three fields. Tver was no exception in this respect. The peasants in Kolesnikov Village (Figure 12a), for example, were deprived in 1861 by their former master of 74 desyatinas of land they had previously worked. The landowners took this land from the middle of the village with the result that the peasants' allotment was divided into two parcels joined only by a narrow band to the north of the otrezok. In order to reach the furthest parcels, the peasants were forced to undertake a journey of 2 versts or to pay the landowner for right of access across his land. Similarly, Dorogino Village lost 25 desyatinas of 'its' land in an otrezok which was so located as to cut off access to the River Azheva, the only source of water for the village (Figure 12b). In this case the peasants bought rights of access by agreeing to work for the landowner (2).

In Tula Province, the fragmentation of the land of whole peasant communes was less marked than in Tver, but nevertheless it was a very real problem. According to Kashkarov in 1902, 27.5% of all communes in the Province held their land in two or more separate parcels, which sometimes were as much as 50 versts apart (3). Detailed data are available only for Yepifanskiy uyezd in 1899:

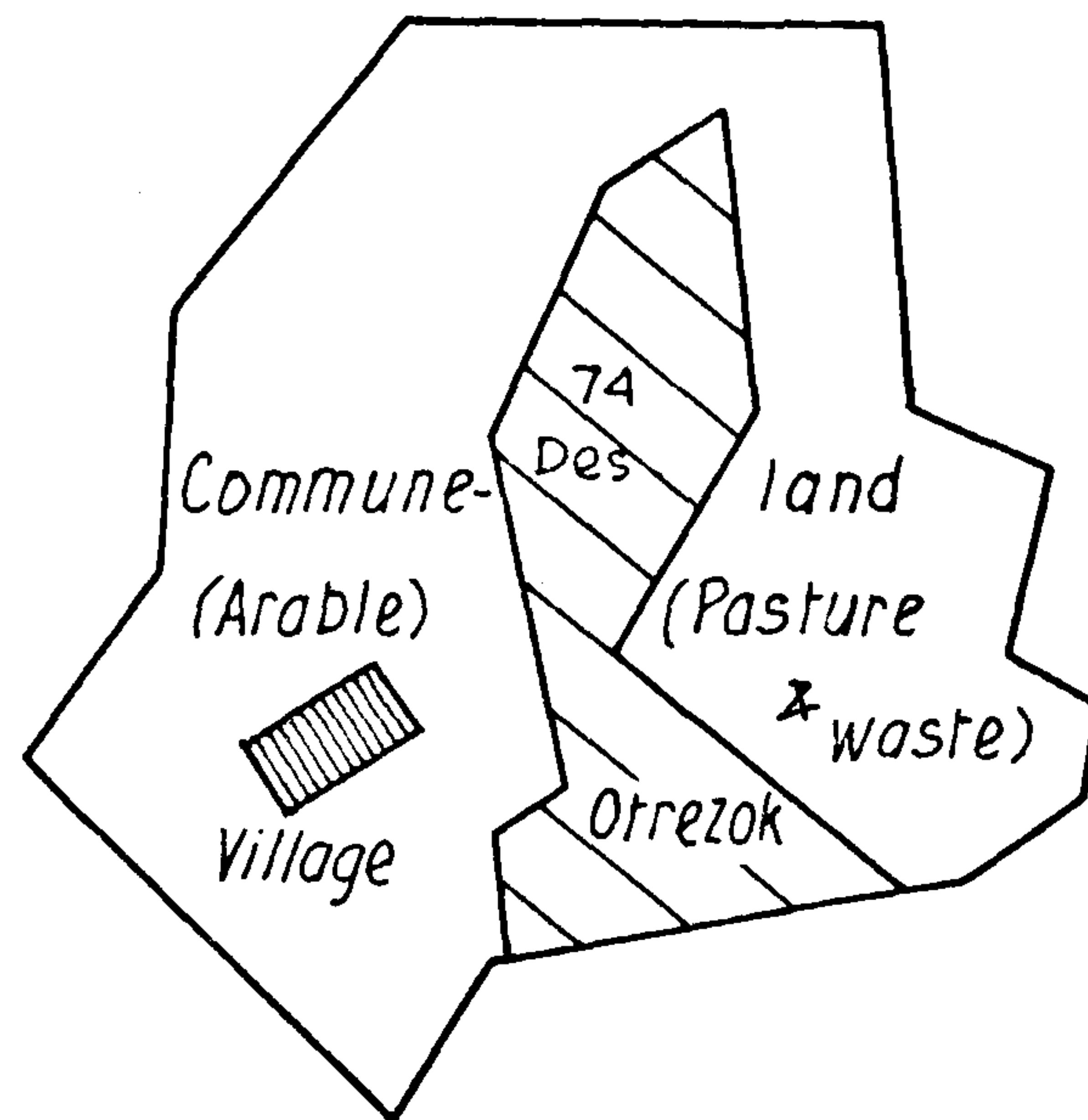
Table 4

The Fragmentation of Commune Land - Yepifanskiy Uyezd, 1899 (4)

	1	2	3-5	6-9	>9	several	>1
Number of separate land parcels							
% number of communes	74.6	9.4	6.1	-	0.3	9.6	25.2

Perhaps the most extreme example of the spatial intermixture of land of different owners in Tula was in Roshdestvennyy sloboda in Yepifanskiy uyezd. The estate covering a total area of 4,828.5 desyatinas was occupied in 1899 by thirteen peasant communes and 141 private landowners, but was divided into no less than 2,110 separate land parcels (4).

(a.) Kolesnikov village, Rzhevskiy uyezd, Tver



(b.) Dorogino village, Rzhevskiy uyezd, Tver.

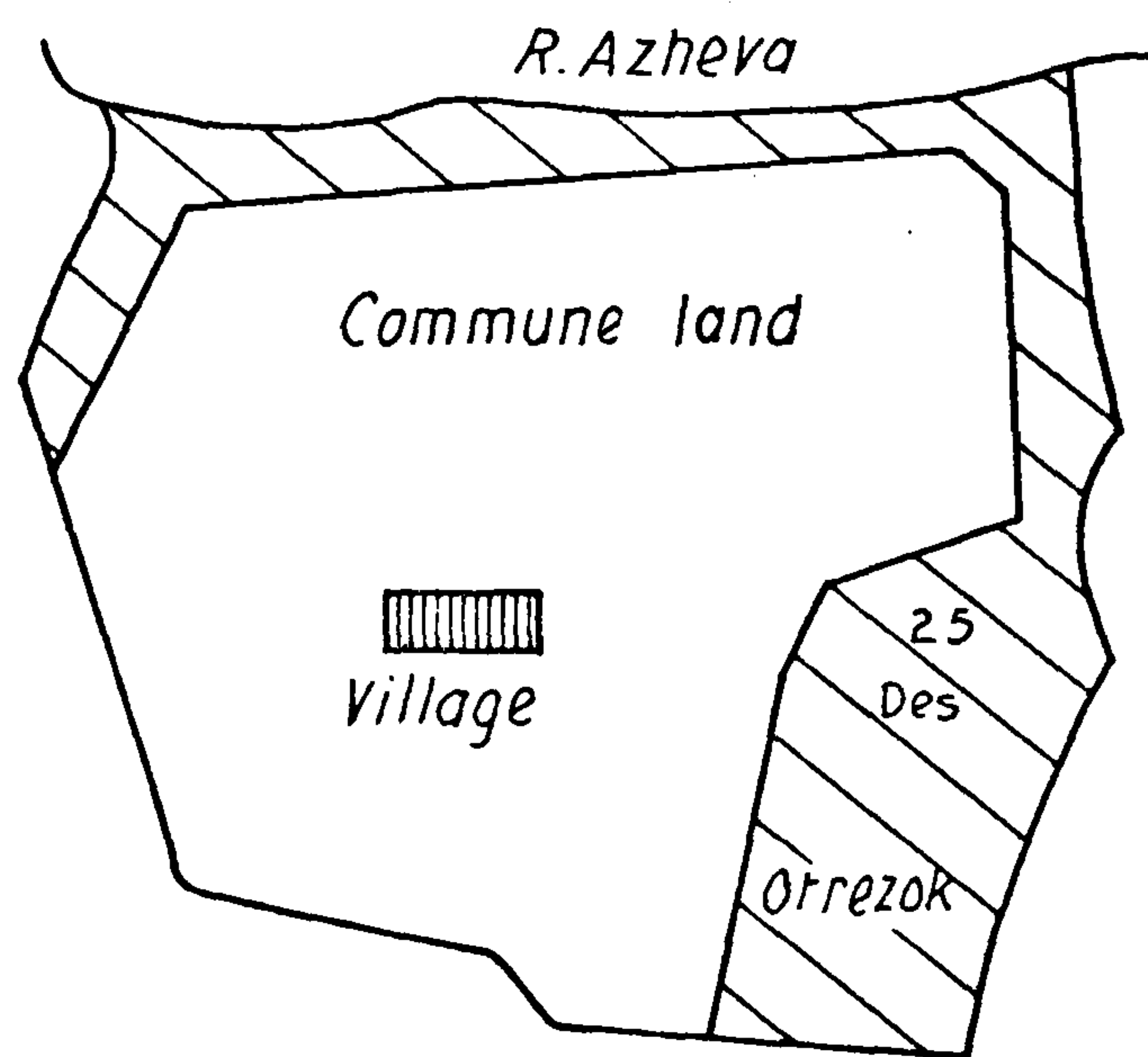


Fig. 12 – Sketch plan of Orrezki taken in communal land of two villages in Tver province 1861

The fragmentation of the land of communes inevitably caused the peasant farmers of both Tula and Tver Province considerable inconvenience. As one peasant in Bezhetskiy uyezd, Tver, explained: "Thanks to the fragmentation of the land in these parts, the peasants waste a lot of time to no purpose. The peasants from Lyubin village for example have to travel one day some four versts beyond the village of Fedorovo to harvest just one desyatina of hay and on the next day the peasants from Fedorovo might have to undertake exactly the same journey to their hayland beyond Lyubin" (5). The archive of the Ministry of Internal Affairs is full of records of complaints such as the above and requests for the redistribution of land. While there were some cases of land being redistributed by the Ministry, for the most part the peasants simply had to content themselves with the existing situation. Sometimes communes, if they were lucky, were able to rent out their more distant land parcels to other communes but more often such land was left to waste. Trostino Village, Tver, for example, held one land parcel 15 versts from the settlement and for the twenty years after Emancipation, "this land was not even visited by any of the peasants". In 1883 it was given 'za vodky' (i.e. free) to peasants in a nearby village (6). Another village, Svistalov, received an allotment in 1861 of 29 desyatinas, 15 versts from the settlement, "but where it is exactly" so the 1883 census reported, "has never been discovered" (7). It is not perhaps surprising that, despite the shortage of land in the Province, the Witte Commission found that no less than 40% of all peasant allotment land in Tver had by 1902 been virtually abandoned constituting the so-called pustosh'. Whenever they were cultivated, the secondary land allotments of communes generally produced low yields.

Problems of distance to secondary land allotments were of course compounded by problems of access. Although not universally the case, it was common for peasants to have to cross tracts of private land to reach their own. The case of Kolesnikovo and Dorogino villages has already been described (p. 66) but many other examples could be quoted. It is revealing that forty years after the abolition of serfdom in the Province approximately 10% of the communes in Tula had (in return for the right of thoroughfare) to provide free labour on the estates of the nobility.

In addition to their land being fragmented, it was not unusual to find communes in both Tver and Tula which, although working their arable separately, shared in common the use of forest, pasture and hayland. 18.6% of the communes in Tver and 8.7% in Tula were thus affected. The way in which villages used such common land varied - it could either be divided into a series of parcels equivalent to the total number of peasant households in all the communes sharing the land and repartitioned annually, or it could be used in rotation by each commune, or again in the case of pasture, it could simply be thrown open to the use of all peasants. In whatever way its use was organised, however, it is obvious that the sharing of land was inconvenient for all parties involved.

The distribution of commune land in Samara Province was considerably less complex than in either Tver or Tula, a result principally of the fact that nobles' estates were few and far between here and wide tracts of land still remained unsettled at the time of Emancipation. It is true that on the eve of the Stolypin Land Reform some of the communes established before 1861 in the Province did hold their land in several places, intermixed with that of the nobility or, more often, the crown but compared with Tver and Tula the number thus affected was small. Many of the inhabitants of the Province in 1906 had in fact come to Samara as freed serfs after Emancipation. These peasants had been able to settle in self-contained villages, or even set up individual farms on land purchased or rented from the crown. It is therefore not surprising that Pershin was able to comment of the Zavolga Provinces at the beginning of this century that, "here less than anywhere else in the Empire are there remnants of the era of serfdom" (8).

II - 1b. The Fragmentation of the Land of Peasant Households in the Three Provinces

In addition to the land of whole communes being fragmented, the allotments of the individual member households were similarly affected. The degree of land fragmentation within the commune - the number of land parcels held per household, their size and their location relative to the place of settlement - varied.

Land fragmentation with the commune was particularly severe in the provinces of the mixed forest belt, primarily a reflection of the varied soil and physiographic conditions of the Region. In Tver Province, according to the household censuses enumerated between 1911 and 1913, individual peasant households held their land in forty or more separate parcels in nearly half of the communes, while in two uyezds, Vishnevolotskiy and Ostashkovskiy, the average number of parcels per household exceeded fifty:

Table 5

The Fragmentation of Peasant Farms in the Commune -
Tver Province, 1911 - 1913 (1)

Average number of separate land parcels per household	10	11-20	21-30	31-40	41-50	51-60	61-100	>100
% number of communes	2.7	11.0	18.5	19.1	17.0	12.8	15.9	3.0

The individual land parcels were, as Table 6 shows, small and it was rare for them to exceed one-fifth desyatina in size:

Table 6

Size of Separate Land Parcels on Peasant Farms in the Commune -
Tver Province, 1911 - 1913 (1)

Communes in which average number of land parcels per household	Average area (in desyatinas) of each land parcel
13.1	0.19
51.9	0.06
92.9	0.04

Interestingly, some peasant communes in Tver Province attempted of their own accord to reduce the number and increase the size of their members' land parcels and thus in a way anticipated one component of the Stolypin legislation (9).

Land fragmentation was less pronounced in Tula and Samara Provinces than in Tver, with an average of fifteen to thirty separate fields pertaining to each household in the former Province and twelve to fifteen in the latter. Comparison of the findings of the survey conducted by G.U.Z.i.Z. in Rzhevskiy and Nikolayevskiy uyezds emphasises the difference between Tver and Samara Provinces in this respect:

Table 7

Fragmentation of Peasant Farms in the Commune - a Sample of Farms
in Rzhevskiy and Nikolayevskiy uyezds (3)

Number of separate land						
Uyezd	parcels per household	1	2	3	4-5	6-10
Rzhevskiy	% number of farms	2.2	-	-	-	0.2
Nikolayevskiy	% number of farms	-	-	0.1	13.5	22.5

Number of separate land						
Uyezd	parcels per household	11-20	21-40	41-60	61-100	>100
Rzhevskiy	% number of farms	13.0	50.7	24.9	8.8	0.2
Nikolayevskiy	% number of farms	58.9	4.7	0.1	-	0.2

The lesser fragmentation of peasant allotment land in Tula and Samara was due primarily to the fact that in most communes in these two Provinces the type of soil and physiographic conditions were relatively uniform - equal opportunity between households in terms of the quality of land they were allotted was far easier to achieve in the level black-earth steppe than in the more varied non-black-earth belt.

In the Provinces under investigation the problems resulting from land fragmentation and the small size of individual fields were accentuated by the fact that a substantial amount of land was often located at a considerable distance from the area of settlement. 'Distant fields' (usually taken to be those more than 3-3½ versts from the peasants' dwelling) (10) were rarely cultivated intensely, if at all, and yields on them were low. The amount of land each peasant held situated 3-3½ versts from his dwelling was determined inevitably by the size and total land area of the commune of which he was a member. Thus in Tver Province, which had predominantly small communes, relatively few peasants were troubled by the problem of 'distant fields'; all the

households investigated in Rzhevskiy uyezd in 1913 by the G.U.Z.i.Z. held all their land within 3 versts of their dwelling place. In Samara in contrast, the problem of 'distant fields' was acute since communes in the Province were extensive, stretching several versts across the steppe. "In the southern uyezds" it was recorded in the Samara Province Directory for 1909, "some allotment land extends 45 versts across completely arid land the peasants often have their land 30, 40 or more versts from their village"(11). The contrast between Rzhevskiy and Nikolayevskiy uyezds is again striking:

Table 8
'Distant Land' on Peasant Farms in the Commune - a Sample of Farms
in Rzhevskiy and Nikolayevskiy uyezds (3)

Uyezd	Distance in versts of furthest land parcel from farm		0.1	0.25	0.5	1.1	3.1	
			-	-	-	-	-	
		0.0	0.5	0.5	1.0	3.0	5.0	>5.0
Rzhevskiy	% number of farms	2.0	0.8	10.0	35.4	51.8	-	-
Nikolayevskiy	% number of farms	-	-	-	-	1.3	-	98.7

In Tula Province the situation was similar to that in Samara, if not quite so extreme. The majority of households in the Province, according to the Witte Commission held at least some of their land more than 3 versts from their dwelling place and not a small number more than 5 versts. The remoteness of land from the settlement nucleations was reflected in the high percentage of partially or completely abandoned land in the Province. In Yepifanskiy uyezd in 1899, approximately 10% of the land in even the smallest communes was not in productive use due to its remoteness and in the larger communes the share was considerably greater:

(see Table 9 overleaf)

Table 9

Abandoned Land in Yepifanskiy Uyezd, 1899 (4)

Area of land (in desyatinas) per commune	% of land partially or completely abandoned
<100.0	10.5
100.01 - 300.0	11.9
300.01 - 500.0	31.8
>500.01	38.6

II - 2. The Size of Peasant Landholdings in Tver, Tula and Samara

Since the principal reason given by the peasants for their poverty was land-hunger it is necessary to consider the size of peasant landholdings on the eve of the introduction of the Stolypin Land Reform. These, as Figure 13 shows, differed considerably from one province to the next. Care must however be taken in comparing sizes of peasant farms; in deciding whether or not peasant households were short of land a whole range of factors must be taken into consideration: environmental conditions - whether soil, climate and physiographic conditions were in general favourable or unfavourable for farming, the system of farming practised - whether intensive or extensive and the degree of land fragmentation. These factors varied from one region to the next, so too therefore did the amount of land required by peasant households to subsist.

In 1900, the Peasant Land Bank conducted a survey to determine what, given the existing system of farming, was the optimum size of farm in different provinces of European Russia (12). Tver and Tula Provinces were included in this survey. According to the Bank's calculations the optimum size of farm for one household in Tver was $24\frac{1}{4}$ desyatinas and in Tula between 14 and 17 desyatinas. These figures correspond to estimates made by other investigators. The 1883 census of Rzhevskiy uyezd (Tver), stated that "a holding of 25 desyatinas allows the average peasant family, using its own labour, to subsist" (13), while a survey made by the zemstvo agricultural department in 1910 found that 24.4 desyatinas of land were required per household in Tver if no reliance was to be placed on outside sources of income (14). Meanwhile, Novikov reported

that a minimum of 5 desyatinas of arable land per revision soul was necessary for subsistence purposes in Tula Province which, given the average of 2.6 revision souls per household, would mean that every household should have approximately 13 desyatinas of land (15).

The Peasant Land Banks' survey did not include the provinces located on the periphery of European Russia, but some idea of optimum farm size can be gained from other sources. In the southern uyezds of Samara Province where the long-fallow (zalezhnaya sistema) system of farming was still practised land requirements were high despite the very good quality of the soil. The Witte Commission estimated that no less than 30 desyatinas of land were required per household here if sufficient grain was to be produced to support all family members (16) and the investigation carried out by the zemstvo in 1909 arrived at much the same figure: "In general terms" it was reported, "more or less profitable farming begins only when, under the extensive system of grain farming and at present levels of production, farms have no less than twenty five to thirty desyatinas of arable land"(17). In the northern uyezds in which the transition from the long-fallow to the three-field system had already taken place by the second half of the nineteenth century, land requirements were lower than in the south being of the order of 12 to 14 desyatinas.

The figures above relate to the optimum or ideal size of farm in the three Provinces. It was possible for households by lowering slightly their consumption levels, defaulting on their financial obligations or temporarily foregoing normal necessities to subsist on lesser amount of land without suffering undue hardship. Real hardship was experienced only when households had so little land that they were consistently short of food and were permanently in debt. It is difficult to determine the point at which such real hardship occurred, but Levachev (18) argued that in Samara the truly landshort households were those which had under 10 desyatinas of land and the same, it would appear from the Witte report, was true for Tula Province. In Tver, the threshold must have been somewhat higher, but no precise figure is available.

Examination of the returns of a Government survey conducted in 1905 (19) reveals that in neither Tula nor Tver Provinces on the eve of the Stolypin Land Reform did the average size of peasant farms, measured in terms of allotment land alone, correspond to the optimum defined by the Peasant Land Bank and other authorities. In both

Provinces it was, in fact, considerably less. This had even been the case twenty five years previously, when population densities were lower, which indicates that the latter two decades of the nineteenth century merely witnessed the worsening of an already poor situation with regard to peasant land ownership in Tula and Tver. In Samara, land was more abundant than in either of the two central Provinces and population densities lower. Hence, even though there was a marked growth in population during the second half of the nineteenth century in the Province - the result of both natural increase and arrival of new settlers - the average size of peasant landholding all uyezds in 1905 was near the optimum.

Table 10

Allotment Land per Peasant Household and Population Density in
the Three Provinces

Province and Uyezds	Optimum size of farm (in desyatinas)	Average area of allotment (in desyatinas) per household 1905 (5)	Density of population per sq. verst, 1914 (13)
Tver	24.4 - 25.0	8.7	39.1
Tula	13.0 - 17.0	6.3	65.6
Samara:		19.9	27.5
Samarskiy)		14.0	No data
Bugulminskiy)		13.4	No data
Buguruslanskiy)	c.12.0 - 14.0	17.8	No data
Buzulukskiy)		21.8	No data
Stavropolskiy)		11.3	No data
Nikolayevskiy)		24.6	No data
Novouzenskiy)	c.25.0 - 30.0	32.4	No data

The percentage number of peasant households suffering from land-hunger inevitably varied between the three Provinces. Comparisons can be most easily made between Tula and Samara in both of which landshort households were considered to be those with holdings of under 10 desyatinas in size. Judging by this standard, nearly 94% of

all peasant households in Tula had a deficit of land and 16.5% in Samara. There were uyezds in Samara in which the percentage number of landshort households was fairly substantial but nowhere did the levels approach those of Tula. While land-hunger in Samara Province was localised and confined to individual communes, in Tula Province it was universal - the Province, as Mozzhukhin observed, was characterised by "a predominance of landshort households in a general undifferentiated mass"(20). In many respects the situation in 1905 in Tver Province was similar to that in Tula with the majority of peasant households suffering from a shortage of land. Two thirds of all households had under 10 desyatinas of land and if, as seems likely, those with larger holdings were also landshort, the overall proportion is much higher (21).

Table 11

The Distribution of Peasant Households by Size of Farm in the
Three Provinces, 1905 (5)

Province	Allotment land per household (in desyatinas)		5.1 - 10.1 - 15.1 -				
			< 5.0	10.0	15.0	25.0	>25.1
Tver) % number of	16.4	52.3	23.7	6.8	0.8	
Tula) farms in each	29.6	64.3	5.3	0.8		
Samara) size group	5.2	11.3	22.4	38.1	23.0	

Not all the peasant households in the three Provinces were dependent exclusively on their allotment land; a certain number had been able during the course of the second half of the nineteenth century to acquire additional land through rent or purchase. In order, therefore, to complete the picture the effect of such extra land on the size of peasant farms must be taken into consideration.

The proportion of all peasant land in private ownership by 1905 is shown in the table overleaf. It was greatest in Tver where the peasants during the latter decades of the nineteenth century were particularly active on the land market:

Table 12

The Share of Communally Owned and Private Land in the Use of
Peasant Households in the Three Provinces, 1905 (5)

Province	Communal Ownership	% of all land in private ownership of		
		Individual peasants	Peasant Communes	Peasant Co-operatives
Tver	69.9	6.1	10.0	14.0
Tula	86.1	2.5	5.3	6.1
Samara	85.0	2.0	2.8	10.2

Through land purchase, peasant households in the three Provinces were able to increase the size of their farms, but the impact that this had on the problem of land-hunger was small since land purchase everywhere was confined primarily to the already relatively well-endowed households. The majority of poor households simply could not afford to buy. They were in a particularly unfavourable position in the provinces of the northern and central black-earth belt where a combination of reluctance on the part of the landowners to sell and the ever-growing demand for more land pushed prices higher and higher and even in Samara, where there was a relative abundance of land and low population densities, prices became increasingly more prohibitive for the small peasant farmers as the nineteenth century wore on.

It would be wrong however to assert that none of the landshort peasant households in the three Provinces purchased land in the years prior to the introduction of the Stolypin Legislation. It was, in fact, the policy of the Peasant Land Bank to render assistance precisely to this category of peasant household and token efforts were made in this direction. Landshort peasant households rarely purchased land individually, but rather participated in joint sales undertaken by their commune as a whole, or, alternatively became members of purchasing co-operatives. The benefits derived by the small peasant households from such land transactions, however, were not always commensurate with the costs incurred. Investigating conditions in Tula Province in 1902, Kashkarov discovered that in many instances the annual repayments owing to the Peasant Bank for the purchase of land exceeded the profits

obtainable on the new land parcel and concluded that, "land purchase is very often accompanied by severe economic hardship for the peasant - especially for those already in debt" (22). Part of the problem derived from the fact that land purchased by communes and peasant co-operatives was very often parcelled out between the co-purchasers and farmed in the same way as was communal land. In some cases purchased land was even repartitioned at intervals. As a result, Kashkarov noted, "very frequently land which when in the ownership of the noble landowner was worked well and gave good yields on transferral into the hands of the peasants declines in productivity and as a result does not pay for itself" (23). The Peasant Land Bank, of course, fixed its prices according to the existing and not the future productivity of the land. Often in both Tula and Tver, the poorest peasant households, unable to meet their annual repayments, sold their portion of land to the richer members of their commune or co-operative - "their (the land-short peasants') insolvency" explained Kashkarov, "very quickly becomes apparent and the land is taken from them and transferred to another in the co-operative or equally divided between all the remaining members, so that in practice the new landowners not infrequently turn out to be of a completely different composition from those who participated in the initial transaction" (24). These findings tend to suggest that the purchase of land although increasing markedly during the years prior to the Stolypin legislation did not modify to any great extent the picture of general land shortage in provinces such as Tver and Tula. Everywhere in European Russia its principal effect seems to have been to increase, or to create, differentials between peasant households.

Rented land had a greater impact on the size of peasant farms than did purchased since in most provinces of European Russia renting was widespread, even the very poorest households participating.

Detailed data relating to the renting of land are available only for selected uyezds in the Provinces under investigation (Samarskiy, Rzhevskiy, Bogoroditskey and Yepifanskiy). Of these uyezds, land rent was most widespread in Samarskiy uyezd and least in Yepifanskiy: a reflection of the difference in the availability and price of land on the periphery of European Russia and in the centre.

(see Table 13 overleaf)

Table 13
Land Rent by Peasant Households in Selected Uyezds
of the Three Provinces

Uyezd	Year	% number of households engaged in renting land
Rzhevskiy (1)	1912	53.4
Yepifanskiy (2)	1911	44.9
Bogoroditskiy (2)	1911	47.0
Samarskiy (6)	1911	64.3

It is clear that in all uyezds land rent increased the total amount of land in the peasants' use on farms of all sizes - both the large and small alike. "In view of the deficit of their own land" wrote Novikov in relation to the situation in Tula, "the peasants naturally try to rent land from the nobles and this is now one of the most significant features of farming in the Province" (25). While it was practised by peasant farms of all sizes, renting of land was, as the table below shows, more common among those households which were already relatively well endowed with land.

Table 14
Land Rent by Size of Farm in Yepifanskiy and Rzhevskiy Uyezds

Uyezd:	Yepifanskiy (1899) (4)		Rzhevskiy (1912) (1)	
	% households in each group engaged in renting land	Average size of rented plot per farm (in desyatinas)	Sown land owned per household (in desyatinas)	% of all land in use rented
Allotment per household (in desyatinas)				
0.0 - 1.01	3.6	0.5	0.0 - 1.0	15.9
1.01 - 2.0	13.1	0.7	1.01 - 2.0	10.4
2.01 - 5.0	52.1	1.6	2.01 - 4.0	38.0
5.01 - 10.0	86.6	3.3	4.01 - 6.0	59.4
>10.01	95.0	8.9	>6.01	35.1

The average size of rented plot per household was also greater. Moreover judging from information available for Yepifanskiy uyezd, the lessors offered the larger farms more favourable terms for the rent of land. Rental agreements undertaken by the landshort, poorer peasants were mostly short term, i.e. for only one year (kratkosrochnaya аренда) or for an undefined period (bezsrochnaya аренда), which in neither case gave the peasant security of tenure or any assurance that prices would not be arbitrarily increased from one year to the next. Such terms of rent, enforced principally because of the landowners' lack of confidence in the peasants' ability to pay, encouraged the over-exploitation of the land and provided little incentive for its improvement - hence it was common for yields on rented land to be much lower than on allotment or purchased land. At the other end of the scale many of the large peasant farms were able to rent for longer periods of time - usually three to six years (dolgosrochnaya аренда):

Table 15

Rental Contracts of Peasant Households in Yepifanskiy Uyezd
by Size of Farm, 1899 (4)

Size of farm (allotment land in desyatinas)	% number of households renting land on		
	short-term contract	long-term contract	Mixed
0.0 - 1.0	70.3	29.7	-
1.01 - 2.0	54.0	44.5	1.5
2.01 - 5.0	47.4	44.4	8.2
5.01 - 10.0	39.3	46.0	14.1
>10.01	37.6	35.5	26.9

Such would appear also to have been the situation in Tver where, according to the 1912 census enumerator, "the peasants with only small land allotments are forced to rely upon renting land at the most unfavourable terms" (26). The Tver Witte Commission reported that "Although 'hunger renting' is highly developed among the landshort, there are in the Province richer peasants who not only rent more land than their neighbours but also do so for longer periods of time" (27).

It is evident that although landshort peasant households through renting were able to increase the area of land in their use, the benefits gained from this increase, in terms of a rise in farm output, were often less than might have been expected. Poor land management, the inevitable corollary of the type of rental contracts in which the small peasant households were forced to engage, meant that yields on rented land were consistently low and, indeed, declined with the passage of time. With increasing pressure of population everywhere in rural Russia rental prices for land began to rise sharply at the end of the nineteenth century.

II - 3. Peasant Farming and the Peasant Economy in Tver, Tula and Samara.

The progressive reduction in the size of peasant land holdings that took place as a result of population expansion during the second half of the nineteenth century meant that an ever-increasing number of peasant households in European Russia were unable to meet their subsistence needs, let alone make a profit, from farming in the commune. Among the first to join the ranks of the 'underproducers' were the peasants of the mixed forest belt. Already in the 1880's approximately one third of all households in Tver had to depend upon grain imported from other parts of Russia and by 1910 farming in the Province could satisfy only 43.6% of the domestic grain requirements.

That Tver early on should record a deficit of grain is hardly to be wondered at - not only were peasant land allotments here small and population densities relatively high compared with other parts of European Russia but the physical environment was unfavourable for farming and particularly unsuited for the then dominant three-field system. More surprising is the fact that by the latter two decades of the nineteenth century many peasants in Tula also suffered from grain shortages; the Province was situated in perhaps one of the most favourable regions of Russia for farming, with its combination of fertile soils and favourable climatic and physiographic conditions. It must be remembered, however, that rural population densities in Tula were higher than anywhere else in European Russia and the size of peasant allotments the smallest. It was inevitable that sooner or later peasant households in Tula would, like their counterparts to the north, begin to have difficulty producing

sufficient grain on their allotment land for personal consumption and sale. It was only in the vast expanses of the southern and eastern steppes, in provinces such as Samara, where land was abundant and rural population densities low that such difficulties were not experienced to any marked degree. Indeed, in contrast to provinces in the northern and central black-earth belt and mixed forest belt, the amount of grain harvested per rural inhabitant in the middle and lower Volga actually increased between 1864 and 1913:

Table 16

Grain Production on Peasant Land in Three Regions, 1864 - 1913*

Image removed due to third party copyright

*Khromov, P.A., *Ekonomicheskoye razvitiye Rossii*, Moscow 1967, p.345.

Nevertheless, by the beginning of the twentieth century pressure of population on the land was felt even in Samara and grain shortages, such as were by then a characteristic feature in Tver and Tula Provinces, became increasingly common.

There were a number of ways that peasant farmers throughout European Russia attempted to offset the reduction in the per capita output of grain on their farms. These can be grouped under three headings first, the extension of the arable, secondly, the intensification of farming and thirdly, the search for alternative sources of income.

II - 3a. The Extension of the Arable.

From the peasants' point of view, the simplest and cheapest method of increasing grain output on their land was to increase the area under arable. The nineteenth century therefore witnessed the steady extension of arable land in European Russia (p. 46). The speed with which this process took place and the area involved however varied between provinces.

Of the three Provinces under investigation, the area of peasant allotment land occupied by arable was greatest in Tula. In 1899, according to Kashkarov, only 16.7% of the peasants' land in the Province remained unploughed and in the southern, more fertile and heavily populated uyezds, the percentage was much lower (28).

Table 17

The Area of Unploughed Land in Tula Province, 1899 (4)

Uyezds	% of peasants' land unploughed in 1899
Benevskiy	21.7
Venevskiy	21.3
Krapivenskiy	19.9
Alekseyev	19.6
Kashinskiy	16.8
Odoyevskiy	16.6
Yepifanskiy	15.6
Novosilsky	14.7
Chernskiy	14.7
Bogoroditskiy	12.8
Average for province	16.7

By the beginning of the twentieth century the 'limit of ploughing' had almost been reached in some uyezds of Tula Province and the result was that severe shortages were felt in other categories of land. In Yepifanskiy uyezd in 1899 there was only just over one half of the natural hayland, one third of the woodland and one seventh of the pastureland required for successful farming under the three-field system.

The quality of the natural hay and pastureland was, moreover, poor. The pasture was usually confined to marshy areas, stoney land or to slopes stripped of soil and there was sufficient to support the then existing number of livestock for only twenty four days of the year. Similarly 55.8% of the natural hayland was classified as being 'sub-standard'. The extension of the arable had other consequences; the ploughing of steep slopes contributed to the formation of ravines and gullies on the peasants' land. Already by 1899 3% of the land in Yepifanskiy uyezd had been lost to productive use through erosion and another 5 to 10% was in 'imminent danger' of being lost.

During the decades following Emancipation, the area of peasant land in Tver put under the plough also increased. Nevertheless, by the turn of the century relatively large tracts of unploughed land still, as is shown below, remained - a reflection of the particular need to maintain large numbers of livestock in the province in order to provide manure to fertilise the poor podsoils.

Table 18
Land Use in Tver Province, 1900

% of peasant land under				
Dwelling and Garden	Arable	Hayland and Pasture	Forest and Scrub	Others
1.8	38.3	34.5	24.2	1.2

Samara was in a somewhat different position from either Tula or Tver in that in many of its uyezds, and especially those in the south, the long-fallow and not the three-field system of farming was practised. The need to produce more grain in the nineteenth century was met here not so much by the extension of the arable on the peasants' land as by the gradual intensification of the long-fallow system.

The extension of arable land in the three Provinces, while providing a short term solution to the problem of grain shortages, in the longer term created even greater problems. Everywhere the loss of natural hay and pasture land forced the peasants to reduce the size of their livestock herds and this inevitably was accompanied by a reduction in the amount of manure available to fertilise the fields. The attendant

decline in yields merely forced the peasants to extend further the arable to maintain production levels. Thus a vicious circle was set up from which there was no escape so long as extensive systems of grain production remained in use.

II - 3b. The Intensification of Farming

During the second half of the nineteenth century significant changes did begin to take place in the pattern of peasant farming almost everywhere in European Russia. These changes were to an extent inevitable for, pressure of population apart, the monetisation of the peasant economy meant that market demand, rather than the subsistence requirements of individual households, began increasingly to dictate what type of agricultural commodities peasant farms should produce. By the turn of the century a series of agricultural regions had emerged in European Russia each with its own specialisation (Figures 14 and 15). Not surprisingly, the most highly specialised agricultural regions were those either located near to the growing urban-industrial centres or alternatively those, which in terms of their ecological conditions, were well suited for the production of those commodities for which there was demand on the market.

The intensification of farming proved to be a solution and, as it was argued at the time, and by many authors subsequently, the only solution to the problem of land-hunger. The latter decades of the nineteenth century did in fact witness the development of a trend towards intensification and yields as a result began to rise everywhere in European Russia (see Appendix IV) but change was slow and, moreover, confined to a minority of peasant farms. So far as it is possible to judge from the experience of Tver, Tula and Samara, the majority of peasant farms remained outside the mainstream of agricultural progress.

TVER

Up to the beginning of the 1880's the pattern of peasant farming in Tver Province was probably little different from what it had been a century earlier, the peasants producing winter rye and spring oats under the three-field system and keeping a variety of livestock for domestic use. Three decades later the pattern was very different. During that time there was a growth within the Province of a wide range of manufacturing and textile industries and of the size of the urban

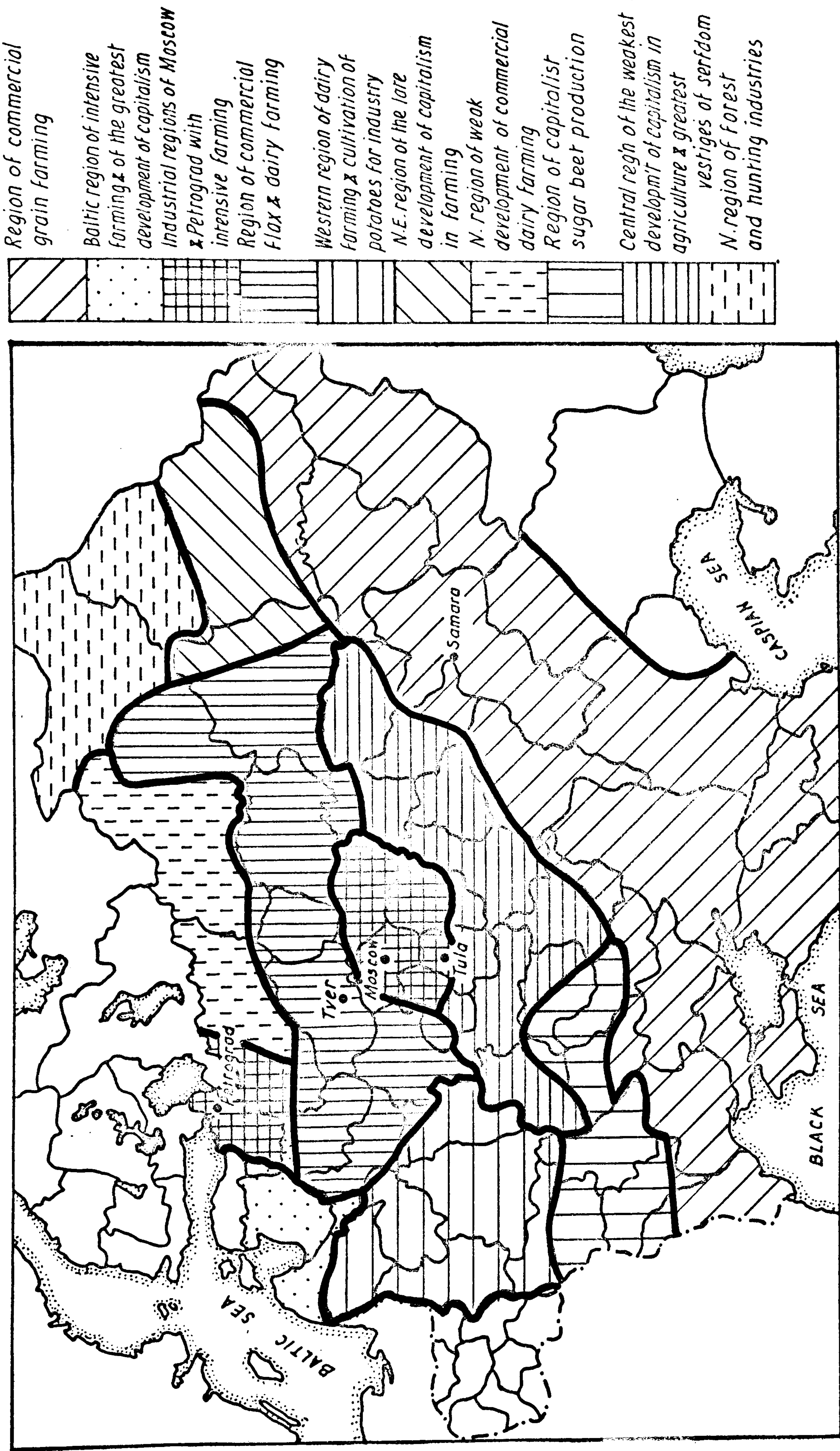


Fig. 14 — Agricultural regions of European Russia before the Revolution (After Pershin P.N. *Agarnaya Revolyutsiya v Rossi*)

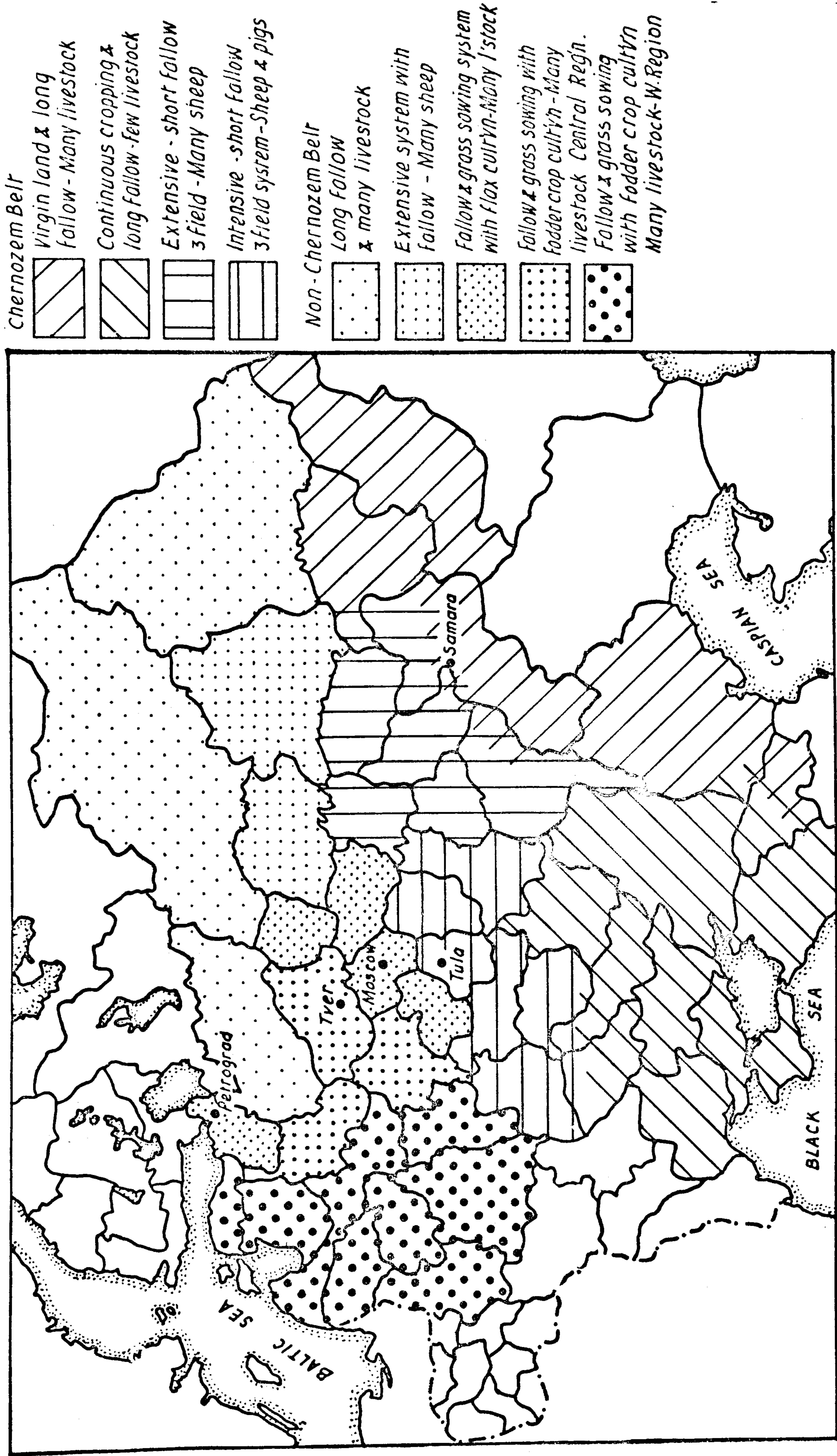


Fig. 15— Agricultural regions of European Russia before the Revolution (2) (After Chelintsev)

population. These changes stimulated peasant farmers in Tver to diversify their crop production and introduce into their fields industrial and market garden crops, and to develop dairy farming, the latter necessitating the introduction of fodder crops, ley grass and clover cultivation. The extent of the changes wrought can be gauged by comparing the census results for Rzhevskiy uyezd in 1883 and 1916:

Table 19
The Distribution of Crops on Peasant Land in Rzhevskiy uyezd,
1883 - 1916

% sown land under										
Year	Win- ter Rye	Win- ter Wheat	Barley	Spring		Spring Oats	Pot- atoes	Flax	Hemp	Ley Grasses and Clover
				Rye	Wheat					
1883(7)	39.0	-	12.3	-	-	33.9	-	14.8	-	-
1916(1)	34.6	0.1	3.1	0.1	0.2	18.5	5.5	22.9	0.3	14.7

In 1883 grains occupied over 85% of the total sown area of peasant land in the uyezd but by 1916 their share had been reduced to just over two thirds. Meanwhile the area under other crops, but particularly flax and clover, increased significantly. As Table 20 overleaf shows, in three yezds of Tver Province flax had already by 1916 displaced spring oats as the second most important crop produced on the peasants' land and in one uyezd clover had also overtaken spring oats.

The very marked diversification of crop production in Tver Province has been taken by Pavlovsky to indicate that farming here was moving to a 'higher level' of development. The contraction of the sown areas devoted to grain and expansion of the area under fodder crops was Pavlovsky argued, "the first and most certain sign of the abandonment of the three-field system and of the transition to scientific arable farming" (29). Detailed investigation of the situation in Tver suggests that Pavlovsky's claim was somewhat exaggerated. Clover and ley grasses were for the most part introduced into communes without any change being effected in the three-field rotation. According to the 1908

Tver Statistical Yearbook, of all the villages in the Province that had begun to cultivate grasses only 14.1% had in fact adopted a four or multiple-field rotation. In the remainder it was common practice to sow grasses on formerly abandoned land or on a parcel of land (klin) specially marked off from the main arable. In neither case was the clover rotated with the spring and winter crops and thus its potential 'rejuvenating' affect on the soil lost.

Table 20

Ranking of Crops on Peasant Land in the 12 Uyezds of Tver Province, 1916 (8)

Uyezd	Rank of crops on arable				
	1	2	3	4	5
Tverskiy	rye	oats	clover	potatoes	barley
Bezhetskiy	rye	oats	flax	barley	clover
Vesegonskiy	rye	oats	flax	barley	clover
Vishnevolotskiy	rye	oats	barley	potatoes	flax
Zubtsovtskiy	rye	flax	clover	oats	potatoes
Kalyazinskiy	rye	oats	flax	potatoes	barley
Kashinskiy	rye	flax	oats	potatoes	clover
Korchevskiy	rye	oats	flax	potatoes	barley
Novotorzhskiy	rye	oats	flax	barley	potatoes
Ostashkovskiy	rye	barley	oats	potatoes	flax
Rzhevskiy	rye	flax	oats	clover	potatoes
Staritskiy	rye	oats	flax	potatoes	clover
Province	rye	oats	flax	clover	barley

The introduction of flax cultivation meanwhile had a positively disastrous effect on the productive capacity of the soil. In the majority of communes in Tver flax was simply incorporated into the three-field rotation, sown in the spring field. Thus it returned to the same place every third year. The result was soil exhaustion and declining yields. In 1900 flax yields in Tver were 25-40 pud per desyatina; in 1916 they were 12-18. Novikov writing in 1902 predicted that, "the three-field system with increased sowings of flax but weak development of ley grass cultivation will lead in the future to enormous

poverty and the complete wastage of the soil" (30). The situation does not seem to have improved during the course of subsequent years for in 1913 the zemstvo agronomist reported that, "the sowing of flax has assumed enormous proportions under the three-field system, but the productive strength of the soil is not being replenished. It is necessary to transform completely the system of cultivation if the uyezd (Zubtsovskiy) is to avoid ruin" (31).

The diversification of crop production in Tver was therefore not necessarily a sign that the three-field rotation had been, or was in the process of being, superseded by more intensive rotations. Nevertheless there is evidence to suggest that the number of communes which had abandoned the old in favour of a new system by the Revolution was greater here than in most other provinces outside the mixed forest belt.

The simplest and most widespread departure from the traditional system in the Province was the four-field rotation whereby communes made out in their arable a fourth field for clover which was rotated with the other crops in succession: winter rye - clover - spring oats and flax - fallow. The principal advantage of this rotation over the three-field was that flax grown after clover instead of winter rye gave higher yields, while, by devoting as much as one quarter of their land to clover, peasant farmers ensured that they had a reliable supply of fodder for their livestock in the winter. The main defect, however, was that flax was still returned to the same parcel of land after too short an interval of time and so the problem of soil exhaustion, although ameliorated, was not eliminated. More sophisticated rotations - six, eight and nine-field - were, however, not unknown in the communes of Tver Province. A local agricultural journal in 1915 cited the example of Kazin village which for eleven years had been operating a multiple-field rotation of: fallow - winter rye - clover - clover - flax - spring oats - fallow - spring oats (32), and in the 1916 issue, there was an article about another village: "it seemed", wrote the reporter "that I had come upon a really civilised corner of the uyezd. The peasants have retained the communal form of landownership but in spite of land fragmentation carry out a correct nine-field rotation with clover in three fields and sowings of flax after clover and, as a result, there are very favourable conditions for the development of dairy farming with many livestock and thus large quantities of manure which is good for the soil" (33). Both villages were reported as having experienced an increase in yields.

The introduction of clover and fodder crop cultivation in Tver was above all brought about by the desire on the part of the peasants to increase the size of their herds of productive livestock for large profits were to be made by producing cheese, butter, eggs and fresh milk for the growing urban population in the Central Industrial Region. The four decades before the October Revolution did, in fact, witness the beginnings of commercial dairy farming in Tver. In Rzhevskiy uyezd, for example, examination of census returns (Table 21) reveals, first, that the number of dairy cattle kept per household increased between 1883 and 1913 and, secondly, the number of cattle per household by 1916 exceeded the number of working livestock. Both were sure signs of an increasingly dairy emphasis in the peasant farming economy.

Table 21
Livestock on Peasant Farms in Tver Province

Province and uyezd	Year	Per 100 inhabitants number livestock				
		Horses	cattle	sheep	goats	pigs
Tver	1914 (13)	14.4	20.8	13.3	0.0	2.7
Per household number livestock						
Rzhevskiy uyezd	1883 (7)	1.2	1.2	1.7	N.D.	0.4
	1912 (1)	1.1	1.4	1.9	N.D.	0.5

The extent of the development in Tver of commercial dairy farming, and more importantly of the improvement in the general standard of livestock husbandry, must not however be exaggerated. In 1916, there were on average only 1.4 cattle per household in the Province, a figure which, while higher than in provinces to the south and east, hardly conjures up a picture of a flourishing dairy farming economy. Despite the expansion of the area of land sown to clover, the basic source of fodder for livestock during the six and half months of stall feeding remained, as before, hay of inferior quality cut from the natural hayland. Meanwhile, in the summer it remained common practice for livestock to be

grazed on the communal pastureland and on the fallow and stubble of the three fields.

Mention must be made of the other "indicators of intensification"; the use of improved agricultural implements and machinery, artificial fertilisers and new strains of seed. The number of modern agricultural implements and machines (iron ploughs and harrows, seed drills, harvester, grass mowers, winnowers and threshers) in use in the Province increased during the four decades preceding the revolution, but still by 1916 they were few and far between, only the more prosperous peasant farmers being in a position to purchase them. Similarly, artificial fertilisers, although introduced on to some peasant farms in the Province as early as the 1880's were not in widespread use three decades later, and the same is true for improved seeds.

There can be little doubt that the period from the 1880's onwards witnessed the beginning of a definite trend towards the intensification of farming in Tver. By the outbreak of War and Revolution, the Province was in fact the proud possessor of some of the most advanced peasant farms in European Russia. The trend towards intensification in Tver, although more marked than in many provinces, was not however as strong as has often been assumed: for the majority of peasant farms intensification, however desirable and however satisfactory a solution to the problem of land shortage, was evidently impossible.

TULA

If by the beginning of the twentieth century the trend towards the intensification of peasant farming was only just beginning to develop in Tver Province, in Tula it was barely perceptible. At the heart of the problem lay the fact that those market forces which in some other provinces of European Russia stimulated changes in the system of farming were only weakly developed in Tula. In Tver, for example, it was principally the peasants' attempts to diversify agricultural production in response to the growth of local urban markets for a wide range of agricultural commodities that led to the abandonment of the traditional system of farming by some peasant communes. In Tula, in contrast, there was little stimulus for the peasant to diversify, for

there were in the Province few large urban centres and, until the improvement of communications, it lay outside the immediate sphere of influence of the growing towns to the north. Grain, and especially spring oats, remained, as in the feudal era, the principal crop grown in the Province and, indeed, its production assumed ever-increasing importance with the sharp rise in grain prices on the domestic market at the end of the nineteenth century. This continued emphasis on the production of grain led, in the words of Novikov, "to considerable uniformity in peasant farming" and, inevitably, served to fossilise the existing extensive systems (34).

Examination of the household census returns for Bogoroditskiy uyezd presented below shows that at the end of the first decade of the twentieth century, grains were indeed still the dominant crop produced on the peasants' land in the commune. Rye occupied the whole of the winter field and oats the greater part of the spring field. Nevertheless it is evident that by 1911 some diversification had taken place with new "progressive" crops such as potatoes and ley grasses displacing some of the grain produced in the spring field. Clearly, however, such crops did not yet seriously challenge the supremacy of spring oats.

Table 22

The Distribution of Crops on Peasant Land in Tula Province

Province and uyezd	Year	Ley							
		Win- ter rye	Spring oats	Minor Spring grains	peas	Grasses and Clover	Pot- atoes	flax	others
	Average								
Tula (13)	1911-15	46.9	37.3	6.2	N.D.	N.D.	7.4	0.3	1.0
Bogoroditskiy (2)	1911	49.4	41.3	1.0	0.1	0.2	6.2	0.0	0.8

Just as in Tver, the diversification of crop production on the peasants' land, although a sign of progress in farming, did not indicate that any fundamental changes had been introduced in the system of cultivation on farms in Tula Province. In fact, the Witte Commission noted that, "although it would seem that with the existing physical and economic conditions in Tula, the three-field system should long ago have been superseded by more intensive methods of farming, in practice there

has not been the slightest experiment in this direction" (35). Potatoes everywhere were introduced into the spring field under the three-field rotation while ley grasses were cultivated almost exclusively on rented or purchased land. Certainly in the southern uyezds of the Province the three-field rotation remained absolutely dominant in peasant communes into the twentieth century. In Yepifanskiy uyezd, for example, the three-field rotation was practised in 1911 on 100% of the peasants' allotment land, 99.5% of the purchased and 98.4% of the rented arable (36).

The failure to develop to any great extent fodder crop cultivation combined with the deficit, consequent upon the extension of the arable, of 'natural' sources of livestock fodder, meant that livestock husbandry in Tula remained at a very primitive stage of development right into the twentieth century. The number of horses, pigs and cattle kept on peasant farms was, as Table 23 shows, low.

Table 23

Livestock on Peasant Farms in Tula Province

Province and uyezd	Year	Per 100 inhabitants number livestock				
		Horses	cattle	sheep	goats	pigs
Tula (13)	1914	16.3	16.9	36.5	0.2	7.1
		Per household number livestock				
Bogoroditskiy (2)	1911	1.2	0.8	4.6	-	0.01

Sheep, however, were relatively numerous (although their number had declined steadily since the time of Emancipation), but this was merely an indication, as Pavlovsky noted, of the "survival of the old system of natural economy (sheep being) par excellence an animal serving the purpose of immediate consumption in the producer's own household" (37). The quality and productivity of the livestock on peasant farms in Tula was far lower than in Tver Province even greater difficulties being experienced in feeding. In 1899 in Yepifanskiy uyezd there was on average only 0.15 desyatinas of hayland per head of livestock, instead

of the required 0.6 desyatinas. During the winter therefore, straw and chaff had to form the bulk of fodder. Meanwhile, in the summer, the shortage of permanent pasture (there was sufficient to support the livestock for only $2\frac{1}{2}$ weeks) necessitated not only the use of fallow and stubble for grazing but also scrubland, the banks of ravines and even grass verges along the roadways.

Where the use of artificial fertilisers, machinery and improved farm implements was concerned the situation in Tula was considerably less satisfactory than in Tver. Artificial fertilisers can quickly be dismissed for there is no record of their use on any peasant farm in the Province before the Revolution. Modern machinery and improved farm implements on the other hand were introduced into the Province during the latter decade of the nineteenth century; their overall numbers however remained very low and, just as in Tver, they were confined to the small minority of richer farms.

SAMARA

Lying in the steppe and forest steppe east of the river Volga and remote from the heart of European Russia, Samara was still in the mid-nineteenth century a region of pioneer settlement characterised by very low population density, few large towns, poor intra-regional communications and economic backwardness. By the twentieth century, this situation had changed radically, for in response to the expansion of foreign and domestic markets, the Province had come to be one of the leading centres of commercial grain production in the whole of European Russia. Conditions in Samara were ideal for the development of commercial grain farming. Here feudal tradition was weak and therefore did not present an obstacle to change but, more importantly the climate and soil were well suited to the production of high grade, hard spring wheat (beloturka) which commanded the highest prices on the grain market.

The development of commercial grain farming in the Province had however to await the development of a comprehensive communications network linking the grain producers to the local markets, and the local markets in turn to the towns of central Russia and the southern ports. Such linkages were established in the latter decades of the nineteenth century when railways began to reach and penetrate beyond the river Volga (38). Thereafter the town of Samara on the banks of the Volga

grew to become the centre of the grain trade in the east and by 1900, it was the leading wheat market in the whole of European Russia. Buyers from all corners of the country - from the major Black Sea ports, from the Upper Volga, from Moscow and St. Petersburg, Baku and Astrakhan - gathered in the Samara market to purchase grain brought in, not only from the provinces along the Volga itself, but also from as far east as Orenburg and the Kirgiz steppe.

The presence in the Province of one of European Russia's principal grain markets and the leading wheat market could not help but influence the whole pattern of peasant farming in Samara. During the first fifteen years of the century there was a rapid and steady expansion of the percentage share of land put under spring wheat on peasant farms in the Province and this took place at the expense of other crops.

Table 24
The Distribution of Crops on Peasant Land in Samara Province (13)

Year	% sown land under							
	winter	winter	spring	spring				
	rye	wheat	wheat	barley	oats	potatoes	flax	others
1901/10	24.0	0.0	55.0	2.8	8.0	0.8	0.3	9.1
1911/15	21.2	0.3	60.8	3.1	6.8	0.8	0.1	6.4

Compared with the central European provinces, industrial crops and ley grass in Samara occupied an insignificant share of the total sown area on peasant farms and, similarly, the proportion of the sown area devoted to winter rye, the principal subsistence crop of the Russian peasant was low.

In their attempt to increase the amount of spring wheat produced, peasant farmers in Samara were forced to introduce fundamental changes in their traditional system of farming. These changes were inevitably in the direction of the more intensive use of the existing land resources. The intensification of farming in Samara, if indeed it can be called that, was however very different from in either Tver or

Tula, for it involved more the substitution of very extensive systems by somewhat less extensive systems (the transition, for example, from the long-fallow to the three-field system).

For most of the early part of the nineteenth century, the regulated long-fallow system (zalezhnaya sistema) dominated in peasant communes throughout Samara Province. Under this system, the commune divided its land into a series of fields, usually about eight, one of which was cropped for three to four successive years while the others remained under fallow. This meant that any parcel of land could be rested for a period of twenty years or more which was adequate for it to be restored to full fertility. With the monetisation of the peasant economy and the gradual exhaustion of the land fund and reduction in the size of peasant farms that took place after Emancipation, the long-fallow system was forced into a decline. With every year the proportion of land sown to cereal crops in communes increased and that left under long-fallow declined so that, as early as 1887, long-fallow occupied only 14% of the total arable in Samara. It was principally in the southern and eastern parts of the Province, where the density of population was low and land therefore still relatively abundant, that the long-fallow system was retained by peasant communes into the twentieth century. Even here, however, the changing conditions in the countryside made themselves felt. Instead of one eighth as previously, now as much as three quarters of the arable land in communes was sown to grain annually, resulting in a sharp reduction in the area of fallow. Three and four-field rotations operating over nine and twelve years respectively came to be the norm: wheat - wheat - long fallow; wheat - wheat - winter rye - long-fallow. Inevitably, with the introduction of such rotations the length of time that land was left under long fallow was reduced, in most cases from the former twenty or more years to only two or three.

Elsewhere in Samara, the long-fallow system was abandoned altogether. By the twentieth century, the majority of communes in the northern and central uyezds of the Province had adopted, or were in the process of adopting, the three-field system. In addition, however, there was a relatively large number of communes in which fallow had been entirely eliminated from the arable and a single-field (odnopol'ye) or a two-field(dvoyepol'ye) system adopted. In the case of the former system there was no defined rotation, spring and winter grains being

sown in the same field year after year, while the latter involved a simple alternation of spring and winter grain cultivation.

The changes that took place in the system of cultivation both in the northern and southern uyezds of Samara reduced the fertility of the soil and the method of working the land in most communes in no way offset, and often even accelerated, this decline. As a result, despite the fact that Samara had become a leading grain producing province by the twentieth century, yields on peasant farms were consistently lower than elsewhere in European Russia and years of low rainfall were increasingly accompanied by complete harvest failure and widespread famine.

Table 25

Yields in puds per desyatina on Peasant Land in Samara,
1901 - 1915 (13)

Crop		Average yields in		
		1901 - 10	1909 - 13	1911 - 15
Winter rye	Samara	38.0	45.0	49.0
	European Russia	50.0	55.0	59.0
Spring wheat	Samara	37.0	43.0	42.0
	European Russia	(45.0)	50.0	50.0
Spring oats	Samara	33.0	43.0	42.0
	European Russia	50.0	55.0	55.0
Barley	Samara	32.0	48.0	48.0
	European Russia	51.0	58.0	56.0

() - incomplete data

The extension of grain cultivation at the expense of long-fallow in Samara was also accompanied by a decline in livestock husbandry on peasant farms. In 1902, the Witte Commission reported that, "livestock husbandry in this region is not flourishing (due to) the small area of pastureland, insufficient winter fodder and the difficulty of controlled breeding and the danger of epidemics" (39) and further, "the local livestock are small and hardly can be fed in years of abundant harvest, and in years of harvest failure and low yields they are slaughtered for their meat and hides" (40).

There can be little doubt that the expansion of the market for grain led to the development of a system of farming in Samara Province that was among the most primitive and rapacious in European Russia. "It is a tragedy" wrote the chief zemstvo agronomist in 1910, "that whilst peasant farming is geared to meet the demands of the market it is at the same time at variance with demands of the soil and climate the peasants have over-rated the importance of wheat (but) have ignored two factors - that farming must conform with natural conditions and that it is not possible to go on growing the same crop on the soil for a series of years without experiencing a reduction in yields" (41).

The one area in which peasant farmers in Samara scored over their counterparts in the central Russian provinces was in the use of modern agricultural machinery. Simply by virtue of the surpluses they were able to produce for sale, farmers on the large farms (those over 25 desyatinas in size) were able to accumulate sufficient capital with which to purchase machinery. Such farms, compared with other provinces of Russia, were relatively numerous in Samara.

II - 3c. The Search for Alternative Sources of Income.

For many peasants in Russia the solution to the problem of land-hunger lay in the search for an alternative source of income to that available simply from tilling the land. Such income was to be had working in the factories and small industrial enterprises springing up in the towns and villages of Russia or on the estates of the landed nobility or rich peasants. During the period following Emancipation, increasingly large numbers of peasants left their farms for all or part of the year, and, working as industrial or agricultural wage labourers, earned money for themselves and for their relatives remaining in their native village. Meanwhile, in some parts of the country households began to engage in what Robinson has described as "self-directed non-agricultural work", making at home products for exchange on the market. By the twentieth century, therefore, there were in Russia alongside those engaged exclusively in farming, peasant households which had a 'mixed economy'; households which, although they still held on to their land, relied for their livelihood to a greater or lesser extent upon 'outside' earnings. For a typology of the 'new class' of peasant households see Appendix V.

The extent to which peasant households were involved in off-farm employment in the three provinces is summarised in Table 26 below.

Table 26
Off-farm Employment in Selected Uyezds of the Three Provinces
1910 / 1912

A.	Uyezd			
	Rzhevskiy (1)	Bogoroditskiy (2)	Yepifanskiy (2)	Samarskiy (6)
% number of households involved in off-farm employment	68.1	72.4	72.5	21.2
% number of popul- ation involved in off- farm employment	18.4	21.2	20.3	8.7
B. % number of households involved in off-farm employment by size of farm				
Size of farm (in desyatinas of sown land)	Rzhevskiy (1)		Yepifanskiy (2)	
	% number households involved		Size of farm (in desyatinas of arable)	% number households involved
0.0	75.3		<3.0	79.8
0.01 - 2.0	64.2		3.01 - 6.0	73.7
2.01 - 3.0	73.1		6.01 - 9.0	72.0
3.01 - 4.0	68.0		9.01 - 15.0	67.5
4.01 - 5.0	60.1		>15.01	76.0
5.01 - 6.0	60.7		Av.	72.5
6.01 - 7.0	58.9			
>7.01	47.6			
Av.	68.1			

Involvement was widespread among households in Tver and Tula but was little developed in Samara. This was partly a reflection of the differences between the provinces in the relative productivity of farming but also of availability of alternative employment; industry in Samara was weakly developed and moreover, the Province was far from the established centres of European Russia. Tver, meanwhile, lay in the heart and Tula within easy reach of the industrial regions centred on Moscow and St. Petersburg.

'Self-directed non-agricultural work' was particularly well developed in Tver. Reflecting the types of raw materials available in the Province, the working of wood, clay, animal hides and flax was important and a wide range of products - wheels, ship parts, utensils, pottery, leather goods and, above all, cloth - was produced. Manufacture was carried on either quite independently at home, the peasants providing their own raw materials and disposing of the finished products on the market themselves, or alternatively to the order of an entrepreneur. By the twentieth century there had emerged in the Province a number of 'factory villages' in which farming had been virtually abandoned, all households engaged instead in work at home for industrial entrepreneurs.

In Tula such domestic industrial production, compared with Tver, was not widespread while in Samara it was virtually non-existent. True, in both Provinces there were blacksmiths, bootmakers and various other craftsmen, but rarely were their products sold beyond the boundaries of the communes of which they were members. The notable exceptions were the communes near the town of Tula itself in which many households were involved in samovar production.

Households which had one or more of their members employed in industrial or agricultural wage labour were numerous in both Tver and Tula. Often, as Table 27 shows, the peasant labourers did not have to venture beyond the boundaries of their own uyezd to find work, but large numbers did make their way to the major industrial towns:

(see Table 27 overleaf)

Table 27
Off-farm Employment - Place of Work in Rzhevskiy and
Bogoroditskiy uyezds

	Rzhevskiy Uyezd (1912) (1)	Bogoroditskiy Uyezd (1911) (2)
% number peasant wage labourers working:		
In own uyezd	50.0	55.0
Outside uyezd	48.8	45.0
Both	1.2	N.D.
Of peasants working outside own uyezd % employed in:		
Own province	12.6	20.1
Moscow	57.4	43.2
St. Petersburg	4.2) 36.7)
Other provinces	25.8	

In Tula large numbers of peasants became wage workers in agriculture. Unfortunately no reliable figures are available, but it is certain that by the twentieth century, apart from those employed locally on the estates of the landed nobility, every spring approximately two million peasants left the villages of the northern black-earth provinces in search of work as ploughmen and harvesters in the region of extensive wheat farming to the south and east.

Although initially the principal reason why peasants sought employment in industry and agriculture was to earn money with which to supplement farm income, with the passage of time increasingly larger numbers failed to return home, and what was worse for their families, failed also to send back their earnings. In Bor village, Rzhevskiy uyezd it was recorded as early as 1883 that the men going off to work as carpenters in Novgorod and Pskov "only reluctantly share their earnings with their brothers left at home and thus there are severe family arguments" (42), and in Sudovo-Barabanino that "29 men went off to work as carpenters in Novgorod and they found such good work there that in the summer they did not return home - nothing has been heard of them since" (43). By the twentieth century the ties that the wage-labourer peasants had with their households had weakened considerably, although

it would be wrong to assume that in all but a minority of cases they had been severed entirely. However, as is evident from census returns in Tver and Tula, relatively few peasant wage labourers continued into the twentieth century to participate actively in farming all the year round.

Table 28

Off-farm employment - Time Involved in Rzhevskiy and
Bogoroditskiy uyezds

A.	Rzhevskiy Uyezd (1912) (1)	
	Employment within	Employment outside
% number of peasants who	own uyezd	own uyezd
were employed for:		
1-3 months	19.8	5.4
4-6 months	30.6	21.5
7-9 months	22.0	42.3
10-12 months	27.6	30.8
	Bogoroditskiy Uyezd (1911) (2)	
part of year		45.5
whole year		47.3
unknown		8.1
B.	Rzhevskiy Uyezd (1912) (1)	
% number of peasants who had:		
severed ties with farming	40.7	69.6
partially severed ties	12.3	20.5
not severed ties	47.0	9.9
	Bogoroditskiy Uyezd (1911) (2)	
severed ties with farming		67.0
partially or not severed		
ties with farming		23.0

The involvement of peasants in off-farm work while a short-term solution to the problem of land-hunger had a number of long term negative consequences; not the least of these was the fact that it helped fossilise the existing primitive systems of farming. Many

contemporary observers noted that households involved in off-farm employment often had neither the incentive nor the labour necessary to improve farming on their holdings - the former because money was forthcoming from elsewhere and the latter because it was predominantly the young male peasants, those with the most energy and initiative, who were most given to labour excursions. This certainly was one of the many factors accounting for the very slow diffusion of new techniques and methods into peasant farming in some provinces during the forty years preceding the 1917 Revolution.

II - 4. The Extent of Poverty in the Three Provinces

The problems confronting peasant farmers in different regions of European Russia varied in type and in magnitude. Everywhere, however they produced the same result - namely that many peasants were reduced to a position of extreme poverty. Such peasants were to be found in Tver, Tula and Samara and there is no dearth of evidence to prove the fact - contemporary journals and newspapers and the records of the M.V.D. and M.Z.i.G.I. contain countless reports of the plight of individual peasants and whole communes. No attempt is made here to put a definite figure to the number of 'poor' peasant households relative to the 'middle' and 'rich' resident in each province on the eve of the Stolypin Reform, for this would involve a long discussion of the unresolved debate about class differentiation in pre-revolutionary rural Russia, but it is apparent from even the most superficial examination of the materials that the extent of poverty and the number of peasants involved was by no means uniform in the three Provinces.

In general terms it would appear that the peasant body as a whole was worse off economically in both Tver and Tula Provinces than in Samara. This is immediately evident if the 'traditional' indicator of peasant economic wellbeing - horse ownership - is examined. In Tver and Tula over 20% of the resident households did not own a horse in 1910/13, while in Samara the corresponding figure was 17.5%. The apparent difference between the Provinces is greater if one accepts Lenin's thesis that any household with only one horse qualified for inclusion in the ranks of the poor.

Table 29
Horse Ownership in Selected Uyezds of the Three Provinces

Uyezd:	Rzhevskiy (1)	Yepifanskiy (11)		Samarskiy(6)
Number horses owned	1912	1899	1911	1911
per household		% number households		
None	21.9	36.4	39.8	17.5
1	55.5	40.0	35.2	20.1
2	20.1	17.6	20.1	25.2
3+	2.5	6.0	4.9	37.2

The impoverished state of the peasantry in Tula is aptly illustrated by information collected by Kashkarov in 1902. In this year more than 20% of all the peasant households in the Province had no horse or cow on their farm, no farm implements and were in debt, while the majority of the remainder had at least one or more of these 'negative attributes'. A breakdown of figures is available for Yepifanskiy and Bogoroditskiy uyezds.

Table 30
The Economic Wellbeing of Peasant Households in Bogoroditskiy and Yepifanskiy uyezds (2)

Uyezd	Yepifanskiy	Bogoroditskiy
% number of households:		
without farm implements	19.0	12.2
without a horse	25.9	18.8
without a cow	19.5	17.2
in debt	61.6	72.5

Corresponding information is unfortunately not available for Tver, but it is probable that the situation here was similar to that in Tula. Certainly, reports compiled by the local zemstvo officials in the twentieth century tell of widespread indebtedness and the absence of livestock and capital on farms: "the peasants have been reduced to such a position of poverty" wrote one observer in Kashinskiy uyezd in 1909,

"that at present many have sold off their last heifer, and all their money has been used up to buy grain and seed. What will happen in the future only the Lord knows" (44).

Although, judging from the percentage number of households with two or more horses, peasant farms in general were stronger in Samara Province than in either Tver or Tula, it would be wrong to under-estimate the plight of the poor households here or to ignore the fact that, according to all contemporary reports, their number was increasing with every year. The Witte Commission painted a pessimistic picture: "From one year to the next the number of horseless households increases while more and more middle peasants join the ranks of households with only one horse. This serves as concrete proof of the peasants' growing impoverishment" (45).

Attention has been focused on the poor in the three Provinces under investigation and little mention made, other than in passing, of the 'rich' peasants. This 'bias' is, however, intentional for it was the poor who were most numerous in the villages of Russia and it was the poor who were in most need of assistance and aid.

NOTES TO CHAPTER II

1. For a general description of the regional and agricultural geography of Russia during the period in question see Chelintsev, A.N., Sel'skokhozyaystvennaya Geografiya Rossii, Berlin, 1923. A background to the geography, history and economic development of each of the provinces is given in Semenov - Tyanshanskiy, P.P. and Lamanskiy, V.I., Rossiya - Polnoye Geograficheskoye Opisaniye Nashego Otechestva, 1899 - 1913; Tom 1, 1899 includes Tver; Tom 2, 1902 includes Tula and Tom 6, 1901 includes Samara. Relevant texts on a variety of topics include:
 Berg, L.S., Natural Regions of the U.S.S.R., New York, 1950.
 Lyashchenko, op.cit. and Miller, M., The Economic Development of Russia 1905 - 1914, London, 1926 give an economic background to the period and Pavlovsky, op.cit., gives an account of agricultural developments.

2. For specific examples of the spatial intermixture of peasant and landowners' land see the early household censuses of Tver Province. The two examples quoted here are taken from: Statisticheskoye Opisaniye Rzhevskogo Uyezda; Statisticheskiy Otdel Tverskoy Gubernskoy Zemskoy Upravi, Tver, 1885, p.22.
3. Kashkarov, M., Statisticheskiy Ocherk Khozyaystvennogo i Imushchest - vennogo Polozheniya Krest'yan Orlovskoy i Tul'skoy Gubernii, St. Petersburg, 1902, Ch.II, P.16.
4. Itogi Otsenочно-Ekonomicheskogo Issledovaniya Tul'skoy Gubernii, Tom 1, Yepifanskiy Uyezd, Vypusk II: Otsenka Ugod'ya. Tula 1903. A full description of the conditions pertaining on the Roshdesvenyy sloboda is given on P.60. The average size of each unit of land on the sloboda was 2.28 desyatinas. One of the landowners, Von Wilke, held his land in no less than 134 separate parcels and at least four others in more than 100 parcels. The communes held their land in 60 to 140 parcels.
5. Sel'skokhozyaystvennyy Obzor Tverskoy Gubernii za 1909 god.VypuskII Rezultati Urozhaya, Statisticheskiy Otdel Tverskoy Gubernskoy Zemskoy Upravi, Tver 1910; Ch.3 - Ob Obschchine.
6. Statisticheskoye Opisaniye Rzhevskogo Uyezda, op.cit., p.21.
7. Ibid, p.21.
8. Pershin, P.N., Agrarnaya Revolyutsiya v. Rossii, Kniga 1. Moscow, 1966, p.67.
9. The most notable example of this was in Kashinskiy uyezd. The traditional system of land allotment in the uyezd involved each household receiving land parcels equivalent in width to the number of allotment units due to each; thus, if a household was entitled to two allotment units, its land parcels would each be 2 sazhen wide. This system while ensuring that every household had the same total number of land parcels, obviously discriminated against the small households in favour of the large. As a result, this system

was abandoned in some communes and instead land began to be allocated to each household in standard sotki (little hundreds) of one-ninth, one-sixth and one-quarter desyatina in area. Every household received parcels of the same workable size, but their quantity varied relative to the number of allotment units to which each was entitled. The Witte Commission reported in 1902 that this system had begun to spread rapidly through the uyezd.

10. This was considered to be the maximum distance over which it was worthwhile carting manure.
11. Pamyatnaya Knizhka Samarskoy Gubernii za 1909, Samara 1910, p.63.
12. Ekonomicheskoye Opisaniye Zemledel'cheskikh Rayonov Rossii po Guberniyami dlya Opredeleniya Dushevykh Norm Zemel'nykh Nadelov, Gosudarstvennyy Krest'yanskiy Pozemel'nyy Bank., 1900. Ts.G.I.A.L.; Fond 592, opis 44, delo 365. For a detailed description of how the figures were arrived at see Appendix III.
13. Statisticheskoye Opisaniye Rzhevskogo Uyezda, op.cit., p.12.
14. Trudy Pervogo Agronomicheskogo Soveshchaniya pri Gubernskoy Uprave, Tverskoye Gubernskoye Zemstvo. Tver, 1910, p.71.
15. Novikov, A., O Sel'skokhozyaystvennykh Nuzhdakh Tul'skoy Gubernii, M.Z.i.G.I. St. Petersburg, 1902, p.6. Novikov is quoting figures produced by Professor Yu.E. Yanson.
16. Trudy Mestnykh Komitetov o Nuzhdakh Sel'skokhozyaystvennoy Promyshlennosti, Tom XXXV. St. Petersburg, 1903, p.51.
17. Slobodchikov, D.Ya. (ed.), Podvornoye i Khutorskoye Khozyaystvo v Samarskoy Gubernii, Tom 1, Samarskoye Gubernskoye Zemstvo. Samara, 1909, p.77.

18. Levachev, K.A., Agrarnaya Reforma Solypina v Samarskoy Gubernii 1906 - 1916, Moscow - Kyubyshev, 1949, chast' 2.

19. Statistika Zemlevladieniya 1905 goda, Ts.S.K., M.V.D., St. Petersburg 1906. Volumes used here:

XXXII	- Tul'skaya Guberniya,
XXXV	- Tverskaya Guberniya,
XXXVIII	- Samarskaya Guberniya.

20. Mozzhukhin, I.V., Zemleustroystvo v Bogoroditskom Uyezde Tuls'koy Gubernii, Moscow, 1917, p.90.

21. Care must of course be exercised in drawing conclusions relating to the relative shortage or abundance of land on peasant farms simply from their size, for the number of people dependant upon a given land area varied from farm to farm. Even taking this into consideration, however, the overall picture must remain the same, namely in Tver and Tula the majority of households suffered from land-hunger, while the opposite was the case in Samara.

22. Kashkarov, op.cit., p.34.

23. Ibid., p.34.

24. Ibid., p.35.

25. Novikov, op.cit., p.15. (1902)

26. Sbornik Materialov dlya Otlenki Zemel' Tverskoy Gubernii, Tom 3, Rzhevskiy Uyezd, Tver, 1919.

27. Svod Trudov Mestnykh Komitetov o Nuzhdakh Sel'skokhozyaystvennoy Promyshlennosti, Tom 1. Arenda. St. Petersburg, 1903. Chapter III has a detailed exposition on the types of rental contracts in which the peasants engaged.

28. Kashkarov, op.cit., for a discussion of land use in Tula Province see p.p. 17-21. Already in 1861 Tula occupied third place among all the provinces of European Russia in terms of the percentage share of land under arable (Kherson and Poltava occupied first and second place).
29. Pavlovsky, op.cit., p.278.
30. Novikov, A., Ob Obshchinnom Vladenii i ego Nedostatkakh; In Trudy Mestnykh Komitetov o Nuzhdakh Sel'skokhozyaystvennoy Promyshlennosti, Tom XLII.St. Petersburg, 1903, p.260.
31. Trudy VII-ogo Agronomicheskogo Soveshchaniya pri Gubernskoy Uprave 1913, Tverskoye Gubernskoye Zemstvo. Tver, 1913, p.77.
32. Baranov, V.M., 9-Letnoye Travoseyaniye. In Sel'skokhozyaystvennyy Listok, No.5. Tver, January, 1915.
33. Doroshchevich, B., Ocherki Sovremennoy Derevni. Iz Poyezdok po Gubernii; In Sel'skokhozyaystvennyy Listok, No.2. Tver, January 1916.
34. Novikov, op.cit., p.33. (1902).
35. Trudy Mestnykh Komitetov o Nuzhdakh Sel'skokhozyaystvennoy Promyshlennosti, Tom.XLIII.St. Petersburg, 1904, p.186.
36. A simple four-field rotation of winter rye - potatoes- spring oats - fallow had been introduced by 1911 on to 642.2 desyatinas of rented and purchase land in the uyezd. On the rented land (499.2 desyatinas in the use of five communes) the four-field rotation had been introduced not as a result of the peasants' initiative but at the instigation of the landowner.
37. Pavlovsky, op.cit., p.315.

38. The first railway to penetrate east of the River Volga was opened in 1877 and ran through Samara and Buzuluk to Orenburg.
39. Trudy Mestnykh Komitetov, Tom XXXV, op.cit., p.266.
40. Ibid, p.51.
41. Trudy III-ogo Samarskogo Gubernskogo Agronomisheskogo Soveshchaniya 10 - 14 Noyabrya, 1912; In Samarskiy Zemledelets, No.4, Samara, 1912.
42. Statisticheskoye Opisaniye Rzhevskogo Uezda, op.cit., p.108.
43. Ibid., p.110.
44. Sel'skokhozyaystvennyy Obzor Tverskoy Gubernii za 1909 god, op.cit., Chapter 4. Ekonomicheskoye Polozheniye Krest'yan.
45. Trudy Mestnykh Komitetov, Tom XXXV, op.cit., p.474.

CHAPTER III

THE SPATIAL REDISTRIBUTION OF PEASANT LAND IN TVER, TULA AND SAMARA - THE IMMEDIATE IMPACT OF THE STOLYPIN LAND REFORM

In accordance with the provisions of the enclosure legislation, Land Settlement Committees were established by the end of 1907 in each of the Provinces currently under discussion and branches were also set up in several uyezds. The work of the Committees was wide ranging, but where the task of actual land redistribution was concerned it fell into two broad categories. The Committees were responsible for carrying out projects concerned, firstly, with the reorganisation of blocks of land belonging to whole peasant communes and, secondly, with the consolidation of the holdings of individual members of the commune. The former type of work was included under the general heading of Grupповоуе Zemleustroystvo, usually translated as Group Land Settlement and the latter of Uchastkovoye Zemleustroystvo - Unitary Land Settlement or Enclosure. The share in the work of the Committees in the two types of work varied, as did the number of peasant households involved; it is thus best to consider each type separately. Appendix VI contains detailed statistical tables of Land Settlement work completed in each of the Provinces.

III - 1. Group Land Settlement in the Three Provinces

Group Land Settlement as Table 31 (over) shows was particularly well developed in Tver and Tula Provinces but was hardly developed at all in Samara.

(see Table 31 overleaf)

Table 31

Land Settlement in the Three Provinces, 1906 - 1916*

Province	Of all households in G.U.Z.i.Z. projects % involved in		Of all land in G.U.Z.i.Z. projects % included in	
	Enclosure	Group Land Settlement	Enclosure	Group Land Settlement
Tver	22.4	77.6	24.8	75.2
Tula	34.6	65.4	47.7	52.3
Samara	87.6	12.4	93.0	7.0

*Otchetnyye Svedeniya o Deyatl'nosti Zemleustroyennykh Kommissi po I yan. 1916. St. Petersburg, 1917.

The number of peasant households affected varied accordingly. In Tula, by 1917, 26.4% of all the peasant households resident in the Province had been affected in some way by this type of land redistribution. In Tver, the corresponding figure was over 14%, but in Samara it was less than 2%. The heavy weighting of the Land Settlement Committees' work in favour of Group projects in Tula and Tver was brought about simply as a result of the very complicated organisation of the land of peasant communes at the time of the inauguration of the Stolypin Reform. Judging from the numbers involved, peasant communes in Tula and Tver were anxious that some of the more serious defects in the organisation of their land should be eliminated, and in this respect at least the Stolypin Reform can be said to have elicited enthusiastic response among the population of Tula and Tver. The weak development of Group Land Settlement Work in Samara can be put down largely to the significantly simpler pattern of land organisation here, as described in Chapter II.

The principal objective of Group Land Settlement was to introduce order into the often chaotic distribution of communal land. The nature of the projects thus completed varied and the dominance of one type over another reflected the particular problems prevalent in any province. In Tver, Tula and Samara most effort in Group Land Settlement work was directed towards unravelling the land of separate communes that was spatially intermixed. Also important, however, and

this refers especially to Tula, were projects designed to unravel peasant land from that of private landowners, to divide between communes land that was held in common, to allot part of a commune's land to groups of households separating from their parent body and, the most basic of the work, simply to demarcate on the ground the boundaries of land ownership (Table 32). In all but the latter, the main objective was to effect exchanges of land so that every commune held its own land in a single consolidated unit surrounding the village settlement.

Table 32

Group Land Settlement in the Three Provinces, 1906 - 1917*

Province	Redistribution of land between villages	Allotment of land to hamlets from village lands	Redistribution of land between different categories of landowner	Division of land held in common between separate landowners.	Demarcation of boundaries between separate landowners	Others
Tver	95.3	2.6	1.2	0.2	0.6	0.1
Tula	51.8	23.1	7.7	2.2	12.7	2.5
Samara	80.6	6.4	1.6	0.0	11.3	0.0

*Otchetnyye Svedeniya op.cit.

An example of results achieved by Group Land Settlement can be illustrated by quoting a project involving the villages of Smedovsky in Tula and Klischino in neighboring Ryazan (Figures 16 and 17). The land of Smedovsky and Klischino before land settlement was fragmented and intermixed with land belonging to a noble landowner. The arable of each village was held in a number of separate parcels, some of which were no more than $\frac{1}{2}$ desyatina in size and as a result, due to problems of distance and access, much had passed out of use. The meadow, forest and

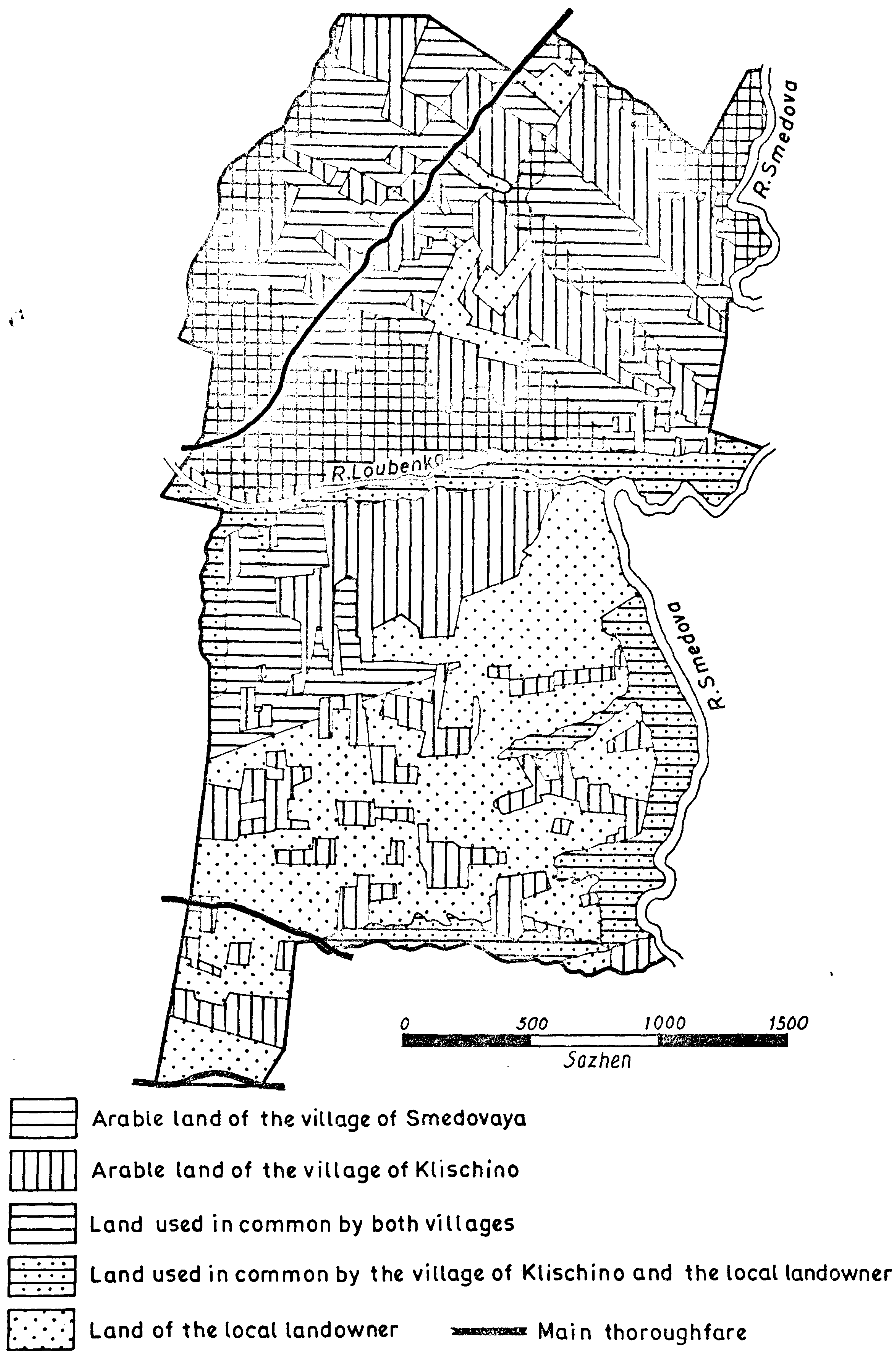


Fig. 16 — Distribution of land held by the communes of Smedovaya & Klischino & by the nobility in Tula & Ryazan before group land settlement

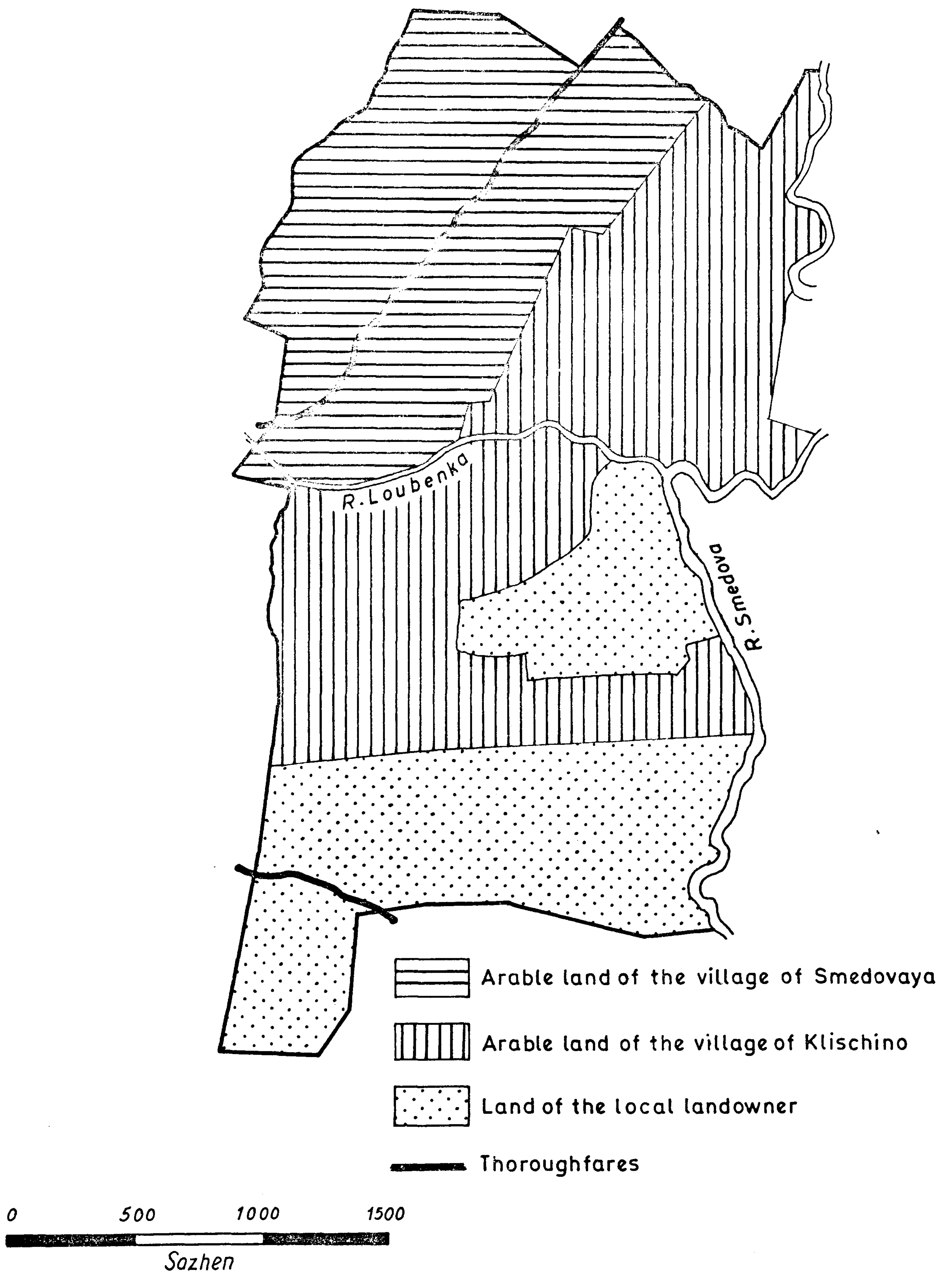


Fig. 17 – Distribution of land held by the communes of Smedovaya & Klischino & by the nobility in Tula & Ryazan after group land settlement

pasture of the two villages were shared and, in addition, Klischino held some land in common with the noble landowner along the river Smedova. The Land Settlement Committee redistributed the land of the three owners ensuring that each retained a portion of meadow and pasture along the river valley.

Once a Group Land Settlement project was complete, the individual communes were then able to distribute their land between member households in accordance with the demands of the majority of households. There was thus at this stage an opportunity for households to enclose their land but rarely in Tver and Tula did this take place. It was far more usual for the peasants to retain the communal form of tenure with which they were familiar (Appendix VI-1) and to repartition the land, as before, into a number of parcels per household. Although thereby denying themselves the benefits of 'individualisation' and 'consolidation', peasant households in such communes immediately felt the advantages of the land redistribution in that all the commune's land was accessible and could thus be brought into use. Group Land Settlement therefore went some of the way towards alleviating the problem of land-shortage in the commune.

While Group Land Settlement work undoubtedly improved conditions for farming in the commune, the attitude of the Government towards it was decidedly lukewarm. Every effort was made by the central authorities to discourage local Land Settlement Committees from devoting too great a share of their time and resources to such work; instead, it was maintained, the Committees should concentrate on the main task at hand - that of enclosure proper. In fact, it was felt that Group Land Settlement might postpone the realisation of the primary aim of the Stolypin Reform because the peasant farmer immediately benefiting from Group Land Settlement would not feel the necessity for further upheavals, especially when his security in the commune was still assured. The Government did not want 'improved' communes - it wanted a completely new farming system in the countryside. Thus it was reported in the Samara Directory for 1909 that many applications had been received from peasant communes for group projects, but that "in view of the necessity of directing all energy towards the fullest and most complete fulfilment of the aim of Land Settlement (the formation of enclosed farms) such applications are always turned down" (1). In Tula and Tver a specific type of Group Land Settlement gained popularity during the

period immediately after the introduction of the Reform which involved the reduction of the number of fields per household and the introduction of a communal multiple-field crop rotation. In communes which adopted this modification, farm productivity was much improved without there being any change in the system of tenure or any disruption of the traditional communal order. By 1911 such projects were virtually outlawed in Tver and Tula and the only work that could proceed under the heading of Group Land Settlement was of the types described above.

Despite a definite lack of encouragement on the part of the authorities, Group Land Settlement did develop rapidly in Tula and Tver as is testified by the number of projects completed. There were two reasons for this. First, as mentioned above, the existing organisation of the land was in both Provinces often so complex that it had to be redistributed before enclosure as such could take place. In this respect Group Land Settlement was a necessary pre-condition to enclosure. Secondly, and probably more importantly, Group Land Settlement developed in Tula and Tver because it answered the particular needs of the peasants; for many peasants enclosure was too radical a change. Group Land Settlement meanwhile promised to improve substantially the conditions of farming but had the special appeal of being able to do so without changing the peasants' traditional way of life.

III - 2. Enclosure in the Three Provinces: Unitary Land Settlement

Enclosure - the formation of khutors and otrubs - was unquestionably deemed to be the first priority of Land Settlement Committees throughout European Russia. In Tula and Tver, however, as already noted, it in fact occupied a subordinate role in terms of all the Land Settlement projects completed to group work. In Samara, in contrast, the emphasis was very much on the formation of enclosed farms. The percentage number of enclosed farms formed to the total of peasant farms in each of the Provinces was different. Of the three, enclosed farms were least widespread in Tver, constituting only 8% of the total by the time of the outbreak of the First World War. This figure was well below the European Russian average of 10.9%. The record for Tula at 11.7% was somewhat better. In neither Tver nor in Tula could the enclosure movement be judged, in purely quantitative terms, to have 'taken off'. Many contemporary observers were of this opinion.

For example, Kofod one of the more ardent proponents of the Reform noted that, "it is already evident that neither in the Central Agricultural nor in the Central Industrial Region will it (enclosure) ever develop with the same vigour as in the southern and south-eastern Steppes" (2). As late as 1913 reports were stating that the enclosure movement had only just begun to develop in the central Russian provinces.

The situation in Samara was very different. By 1917 23.7% of peasant households had enclosed under the provisions of the Stolypin Legislation and the Province ranked fourth among all in Russia in terms of the number of enclosed farms formed. The Governor of Samara was able to boast in 1910 that enclosure had received "very wide development in all uyezds of the Province" and that "in terms of the organisation and progress of Land Settlement work, Samara is one of the leading provinces in European Russia" (3).

Within the provinces variations in the percentage number of enclosed farms formed were quite considerable and in some cases so great as to give a false impression of the performance of the Province as a whole. Nowhere was this more evident than in Samara; as Table 33 shows, just two uyezds, Novouzenskiy and Nikolayevskiy, accounted for over 70% of the khutors and otrubs formed between 1906 and 1916 and the other five for the remainder.

Table 33

Enclosure in Samara Province, 1908 - 1916*

Uyezd	% share of all enclosed farms	% of enclosed farms to total in uyezd
Buzulukskiy	10.4	13.7
Buguruslanskiy	7.7	11.8
Bugulminskiy	2.8	4.7
Samarskiy	4.4	10.2
Stavropolskiy	3.9	7.5
Novouzenskiy	47.4	86.4
Nikolayevskiy	23.4	32.1
Province	100.0	23.7

*Calculated from Zemelnyy fond Samarskoy Gubernii. Vypusk 4. Samara 1917 p.p.4-5.

In Tula the variation was also marked; in three uyezds, Belevskiy, Yepifanskiy and Bogoroditskiy, approximately one quarter had enclosed by 1916 but in other uyezds the number was limited. In Tver the variation was slightly less pronounced. (Table 34 overleaf)

The method whereby enclosed farms came into being in the uyezds of each of the Provinces is shown in Table 35 overleaf: it well illustrates the anomaly noted in the Introduction (p.25/6), namely, that contrary to what might be expected, in some areas in which the number of enclosed farms was extremely limited the dominant method of formation was through communal enclosure - and vice versa in areas in which enclosed farms were relatively numerous. The case of Tver is particularly interesting: in all but one uyezd, communal enclosure accounted for upwards of three quarters of all enclosed farms formed and yet the total number of enclosed farms was very low. No completely satisfactory explanation can be given, but much can be attributed to the size of villages in the Province, the extreme parcellation of their land and the varied ecological conditions. Villages in Tver were very small, often consisting of less than twenty households, but the number of land parcels pertaining to each high; the decision of a few households to enclose unilaterally would have a very disruptive affect on the village as a whole, far more so than in the larger and less fragmented villages of Tula and Samara. In all probability, even if they were opposed to it, all households in such settlements would have no option but to enclose once the movement was started by one of their number. In addition, since variation in land capability was particularly marked in Tver (in common with all provinces of the mixed forest belt), the withdrawal of one household might stimulate otherwise reluctant peasants to enclose for fear of losing the best land in the village. There can be little doubt that there were many instances in Tver of the majority being forced into enclosure by the minority, and in this the Land Settlement Committee played a decisive role in backing the latter.

In Samara, the number of khutors and otrubs formed as a result of communal enclosure exceeded the number formed through individual enclosure. However, the bias, as was the case with the percentage number of enclosed farms, was due mainly to the contribution of Novouzenskiy and Nikolayevskiy uyezds. In the remaining uyezds, where the number of enclosed farms was low, the figures available suggest that relatively few were created through communal enclosure. During the

Table 34

Enclosure in Tver and Tula Provinces, 1906 - 1917

Province and uyezds	% share of all enclosed farms	% of enclosed farms to total in uyezds
<u>Tver</u>		
Bezhetskiy	7.7	4.4
Vesegonskiy	9.5	7.5
Vishnevolotskiy	7.9	6.2
Zubtovskiy	8.8	11.8
Kalyazinskiy	0.3	0.3
Kashinskiy	6.6	7.4
Korchevskiy	7.3	7.8
Novotorzhskiy	11.8	12.6
Ostashkovskiy	4.2	4.3
Rzhevskiy	18.9	19.2
Staritskiy	12.3	11.9
Tverskiy	4.6	6.0
Average for Province	99.9	8.0
<u>Tula</u>		
Aleksinskiy	3.1	5.3
Bogoroditskiy	31.5	26.1
Venevskiy	5.2	6.7
Belevskiy	12.6	24.0
Yepifanskiy	24.6	25.4
Krapivenskiy	2.0	2.6
Odoyevskiy	3.8	5.3
Tulskiy	6.8	8.0
Yefremovskiy	5.7	4.7
Chernskiy	4.7	5.6
Average for Province	100.0	11.7

Table 35

Enclosure in the uyezds of Tver, Tula and Samara Provinces, 1906-1916*

Province and Uyezd	% of enclosed farms formed through:		
	communal enclosure	individual enclosure	other methods
<u>Tver*</u>			
Bezhetskiy	81.1	18.9	-
Vesegonskiy	90.5	9.5	-
Vishnevskiy	78.1	19.1	2.8
Zubtsovskiy	84.5	15.5	-
Kalyazinskiy	10.7	89.3	-
Kashinskiy	86.0	14.0	-
Korchevskiy	95.5	4.4	0.1
Novotorzhskiy	94.0	6.0	-
Ostashkovskiy	88.8	11.2	-
Rzhevskiy	97.3	2.4	0.3
Staritskiy	88.7	11.3	-
Tverskiy	85.8	9.9	0.4
Province	89.2	10.3	0.5
<u>Tula*</u>			
Aleksinskiy	29.7	49.3	21.0
Bogoroditskiy	31.0	64.6	4.4
Venevskiy	38.1	51.4	10.5
Belevskiy	90.0	10.0	-
Yepifanskiy	45.6	20.6	33.8
Krapivenskiy	31.0	68.4	0.6
Odoyevskiy	39.1	10.1	50.8
Tulskiy	88.7	11.3	-
Yefremovskiy	29.2	66.3	4.5
Chernskiy	52.3	28.2	19.5
Province	47.5	38.5	14.0
<u>Samara**</u>			
Buzulukskiy	No data	No data	-
Buguruslanskiy	0.2	99.8	-
Samarskiy	42.2	57.8	-
Stavropol'skiy	-	100.0	-
Bugul'minskiy	17.2	82.8	-
Novouzenskiy	93.4	6.6	-
Nikolayevskiy	53.8	46.2	-
Province	70.0	30.0	-

*Otchetnyye Svedeniya ... op..cit.

**Zemleva i novyy fond Samarskoy Gubernii. Vypusk 4. Samara 1917, p.p.10-11.

first years of operation the Land Settlement Committee in Samara was encouraged by the number of petitions it received from whole communes requesting that their land be enclosed, but by 1911 it realised that its former optimism had not been well founded. In the Samara Directory for 1911, the Chief Administrator for Land Settlement in the Province noted that in the northern and central uyezds the Committee had had to "resign itself" to working just with groups of peasant households rather than with communes of peasants (4). Here then is an example of where the hypothesised relationship between the number of enclosed farms and their method of formation would seem to have foundation. It is important to note, however, that a feature of individual enclosure in Samara was that, in contrast to the central Russian provinces where it involved usually only a minority of peasant households in the commune, the number involved was often quite considerable. It was not uncommon for over half the households in a commune to enclose under the banner of 'individual separation', leaving the minority, and not the majority, in the commune. Individual enclosure in Samara could therefore under some circumstances represent the wishes of the majority.

The number of peasant households that enclosed and the method whereby this was effected illustrate the variation in the degree to which the basic principles of the Stolypin Reform were accepted by the peasants in the three Provinces. The form that the newly formed farming units took also varied. A common denominator, however, was that, in line with other provinces in European Russia, only rarely did the enclosed farms in Tver, Tula and Samara conform to the model laid down by the Government of a completely consolidated, self-contained farm on which the owner's dwellings and outbuildings were situated.

Khutors constituted the minority of enclosed farms in each of the three Provinces, but, interestingly, they were relatively most numerous in Tver, and virtually absent in Samara (Table 36 overleaf). So far as it is possible to judge from the Government's survey of 1913 (5), the enclosed farms in their final form in Tver, whether khutors or otrubs, were considerably more satisfactory and nearer the model than those in either Tula or Samara. Of the farms surveyed in Rzhevskiy uyezd, one quarter consisted of a single land parcel and over half of the remainder of only two; also, as a result of enclosure, the maximum distance that the peasant had to traverse to reach his furthest field in nearly 90% of all cases did not exceed 1 verst (Table 37 overleaf).

Table 36

Type of Enclosed Farms Formed in Selected Uyezds of the
Three Provinces

Of all enclosed farms on allotment land %:

Uyezd	Khutors with movement of household on to land	Khutors without movement of household on to land	Otrubs
Rzhevskiy (3)	$\frac{21.9}{37.9}$	$\frac{16.0}{37.9}$	62.1
Nikolayevskiy (3)	$\frac{7.4}{7.4}$	$\frac{0.0}{7.4}$	92.6
Samara Province (6)	11.8		88.2
Bogoroditskiy (9)	21.5		78.5

The contrast is striking with the situation in Nikolayevskiy uyezd where over half of the enclosed farms sampled consisted of two separate land parcels and a substantial number consisted of three; moreover, just as before enclosure, the vast majority of peasant farmers held some of their land more than 5 versts from their dwelling. In comparison in Bogoroditskiy uyezd, the khutors sampled by Mozzhukhin consisted on average of $2\frac{1}{2}$ parcels and otrubs of 3.7 (6).

As a result of enclosure, the problems of land fragmentation and of accessibility were significantly reduced on a number of peasant farms in the three Provinces, but they evidently were not eliminated entirely. The reasons for this varied. The failure, for example, of khutor formation to become more widespread can be attributed principally to the expense involved in the operation. In Samara and Tula the cost was particularly high due to the arid conditions - on each new khutor a well had to be dug (p.172). Complete consolidation could also be impracticable on both khutors and otrubs because particular types of land were fixed by location. So long as the peasants continued to employ their traditional systems of farming, as was often the case in the first years following enclosure, they continued to require a 'plot' of arable, hayland, pasture and forest and it was usually impossible to unite all these into a single parcel. This is illustrated by the case of Stupino village, Tver (Figure 18). In Stupino, there was an area of woodland, formerly in communal use, located to the east and south of the arable; on enclosure, each household demanded its due share of the wood but in only a minority of cases (Nos. 26-28 and 36-40) could it be united with the arable. Much the same sort of constraint existed over the complete consolidation of land in the villages of Grachevka and Borma, Samara (Figures 20 and 22) where hay and scrubland were fixed by location.

Finally, the 'fragmentation' of some of the enclosed farms can be put down to sub-division after enclosure. Mozzhukhin quotes examples from Bogoroditskiy uyezd of what he called the peasants' 'irresponsibility' after moving on to enclosed farms. For example, the group of peasants that settled in Nikolayevskiy hamlet, the land of which had been prepared by the Land Settlement Committee in a series of separate otrubs, destroyed all the boundaries between the farms and then divided the land into three fields, allotted several parcels of land in each to every household and reverted to the traditional communal practices of grazing livestock on the stubble and repartitioning at set time intervals.

Table 37

The Change in The Distribution of Land on Enclosure in
Rzhevskiy and Nikolayevskiy Uyezds (3)

% of farms on which number of land parcels:	Rzhevskiy		Nikolayevskiy	
	Before enclosure	After enclosure	Before enclosure	After enclosure
1	2.2	27.1	0.0	0.3
2	0.0	56.8	0.0	57.7
3	0.0	11.8	0.1	39.1
4-5	0.0	3.8	13.5	2.6
6-10	0.2	0.5	22.5	0.3
11-20	13.0	-	58.9	-
21-40	50.7	-	4.7	-
41-60	24.9	-	0.1	-
61-100	8.8	-	0.0	-
>100	0.2	-	0.2	-
% of farms on which distance (in versts) of furthest land parcel from farmyard:				
Adjacent	2.2	24.3	0.0	0.3
<0.25	0.8	24.1	0.0	0.2
0.25-0.5	9.8	22.5	0.0	0.1
0.5-1.0	35.4	18.9	0.0	0.9
1.0-3.0	51.8	8.5	1.3	9.2
3.0-5.0	0.0	0.4	0.0	15.4
>5.0	0.0	1.3	98.7	73.9

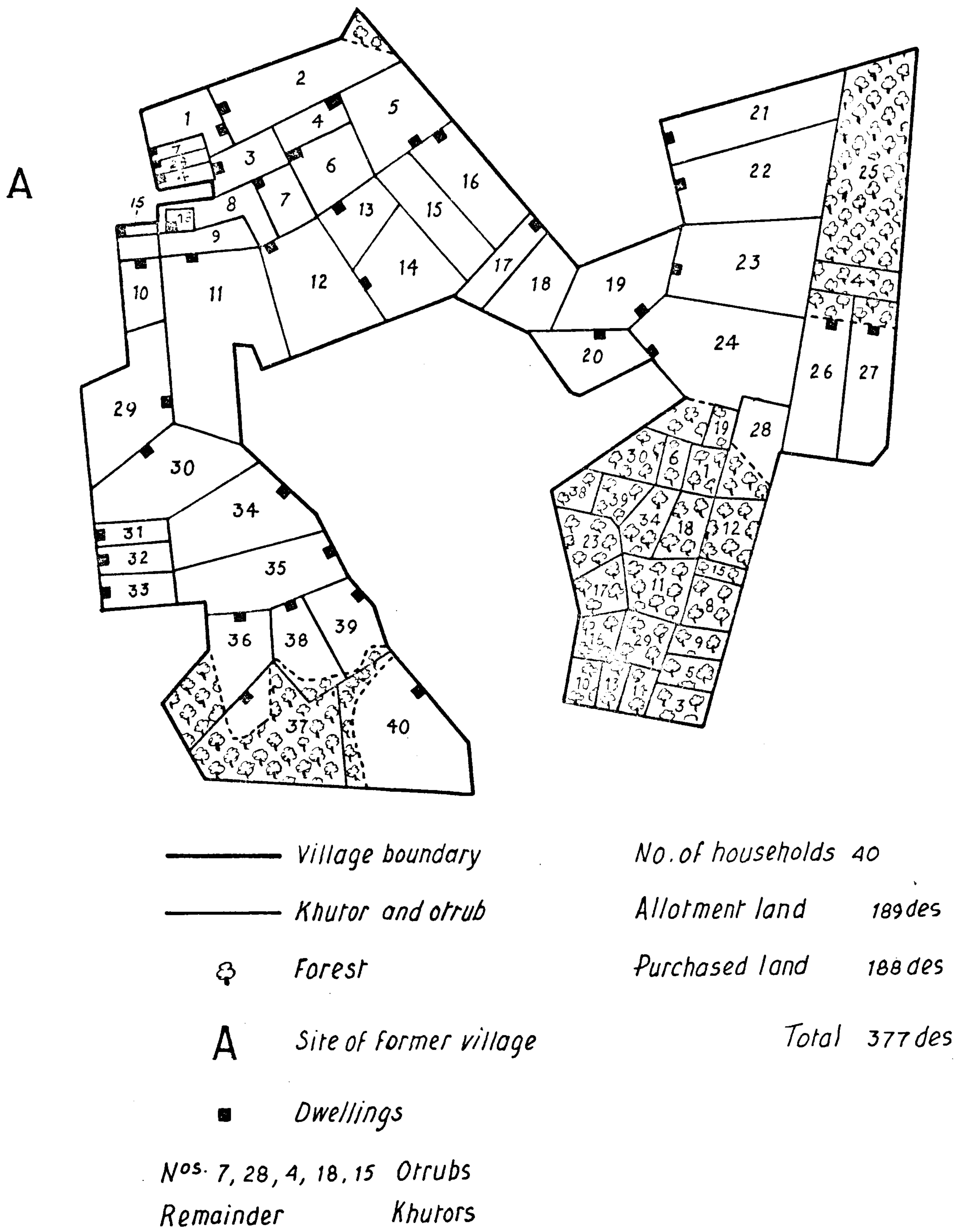


Fig. 18 – Stupino village , Rzhevskiy uyezd Tver province after communal enclosure 1912

Again, two brothers from Taushevka village moved on to neighbouring khutors but decided to amalgamate them; they formed three arable fields, in which each brother held one parcel, and demarcated off two separate parcels of land to be left under grass for hay and also an area of permanent pasture to be used jointly - thus together with the two dwelling/garden areas, eleven separate land parcels were created where previously there had been two (7).

Such instances of reversion to communal practices as those quoted above were probably not the norm but they do serve to emphasise the point that the enclosure legislation included no provisions prohibiting the sub-division of enclosed farms once formed. The implications of this singular lack of foresight on the part of the legislators were considerable for future generations, for on the death of the original owner there was nothing to prevent the consolidated holding being divided between all the heirs. Already by the time of the official Government investigation in 1913, 2% of the enclosed farms in Rzhevskiy uyezd and 1.8% in Nikolayevskiy had undergone sub-division as a result of inheritance - this within three years of enclosure. The number of such occurrences could only increase in the future.

Given that complete consolidation, for whatever reasons, was only rarely achieved on enclosure, it is not surprising that the peasants were still forced, as they had been in the commune, to undertake journeys to sections of their farms, sometimes of considerable distances. The distances involved obviously depended on the size of the original village. This would explain the very marked difference in the situation on the enclosed farms in Rzhevskiy and Nikolayevskiy yezds already noted. Communes in Samara Province were very large extending often many versts across the steppe. On enclosure some peasants had to receive their land in the remotest corners of the former commune and, since few were able actually to move from the village settlement due to the constraint of water availability, it was inevitable that the distance between farmyard and arable would be considerable. For the peasants who were allocated their otrubs far from their dwelling place the situation after enclosure was probably worse than it had been before: while in the commune such peasants would have had at least some of their land within easy reach. The Samara Land Settlement Committee did attempt to come to grips with the problem of excessive distance by forming otrub-hamlets (otrubbye poselki) as an alternative to khutors proper. A group of households would be moved out of their parent village on to a remote parcel of land

and resettled in a nucleated hamlet. Here the peasants would jointly bear the cost of digging a communal well, but their land would be divided into separate otrubs and farmed individually. Such otrub-hamlets were also fairly frequently encountered in Tula.

A feature that the three Provinces shared in common was that when a whole village was being enclosed the common pastureland would often be left out of the land redistribution and retained in the joint use of all the peasant households (see Appendix VI-1). Retention of communal pastureland obviously ran contrary to the wishes of the authors of the Reform; it was, however, inevitable as some provision had to be made for the summer grazing of livestock until multiple-field rotations were established on enclosed farms, which took a number of years. The Land Settlement Committees viewed the retention of common pasture as a temporary measure, necessary during the transitional period to a higher system of farming, but there is little evidence of it having been abandoned in any of the Provinces by the time that war broke out which in some cases was over five years after initial enclosure.

For a variety of reasons, therefore, enclosed farms in the three Provinces often fell short of the ideal put forward by the legislators in 1906. To an extent this influenced the way in which farming was practised on the new units; certain features of the organisation of the land on the enclosed farms, the retention of the common pastureland and the division of holdings into parcels of different land use, helped to perpetrate practices associated with farming in the commune, while the need for some peasants to travel several versts to their arable plot continued to exert a negative influence. Distances were too great to make carting out manure to the fields worthwhile and there were problems of supervision.

What the new farms looked like can be seen by examining plans drawn by the Land Settlement Committees. Unfortunately, the only plans published were of near perfect situations but they nevertheless illustrate most of the points made above.

Grachevka village in Samara (Figures 19 and 20), shows the results of communal enclosure into khutors. Grachevka occupied an area of uninterrupted steppe in the northern part of Samara uyezd and its land extended in a long band along the left bank of the river Yumratka. As Figure 19 shows, the arable of the village was divided before

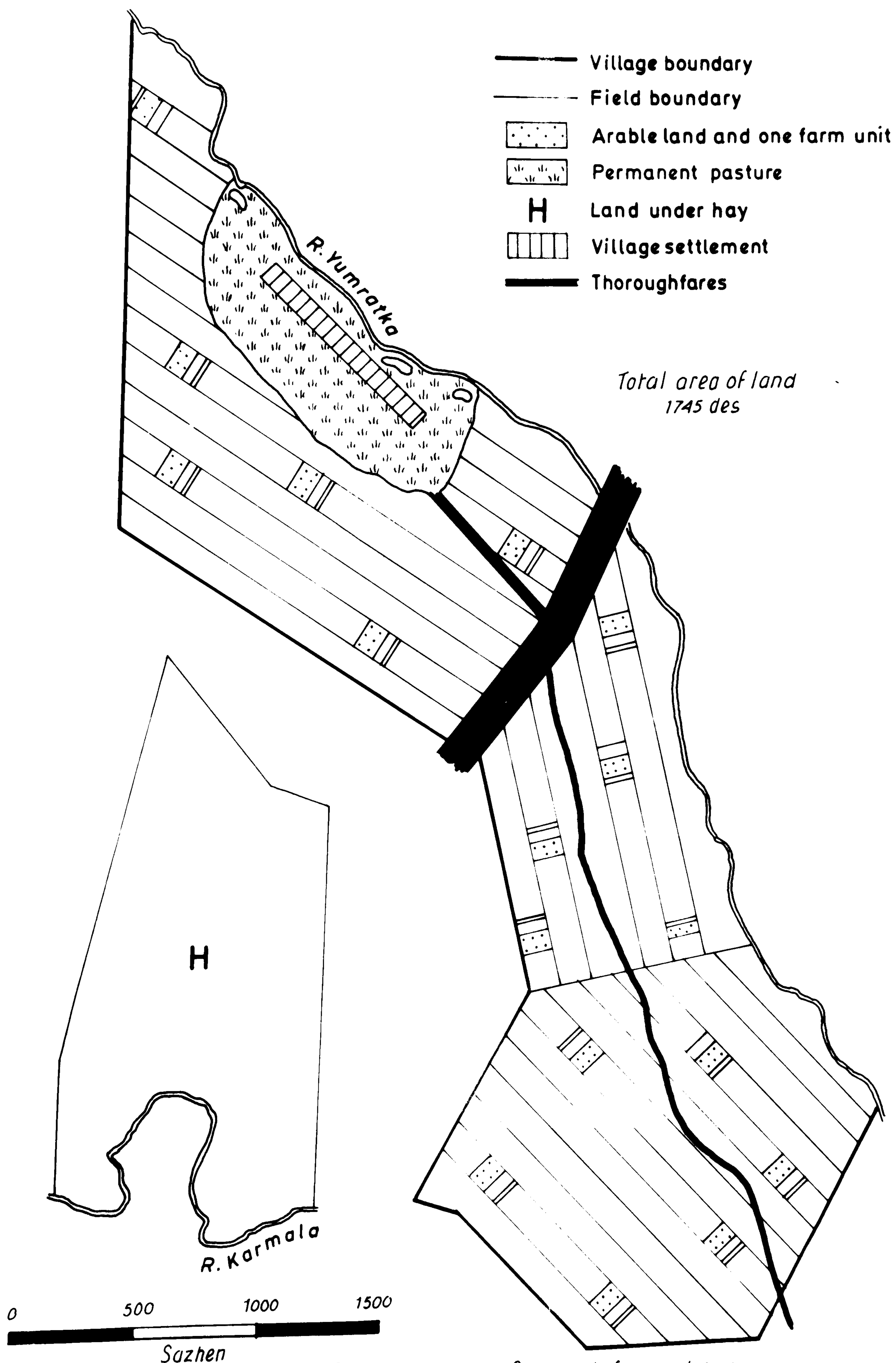


Fig. 19 – Grachevka village, Samarskiy uyezd, Samara, before enclosure

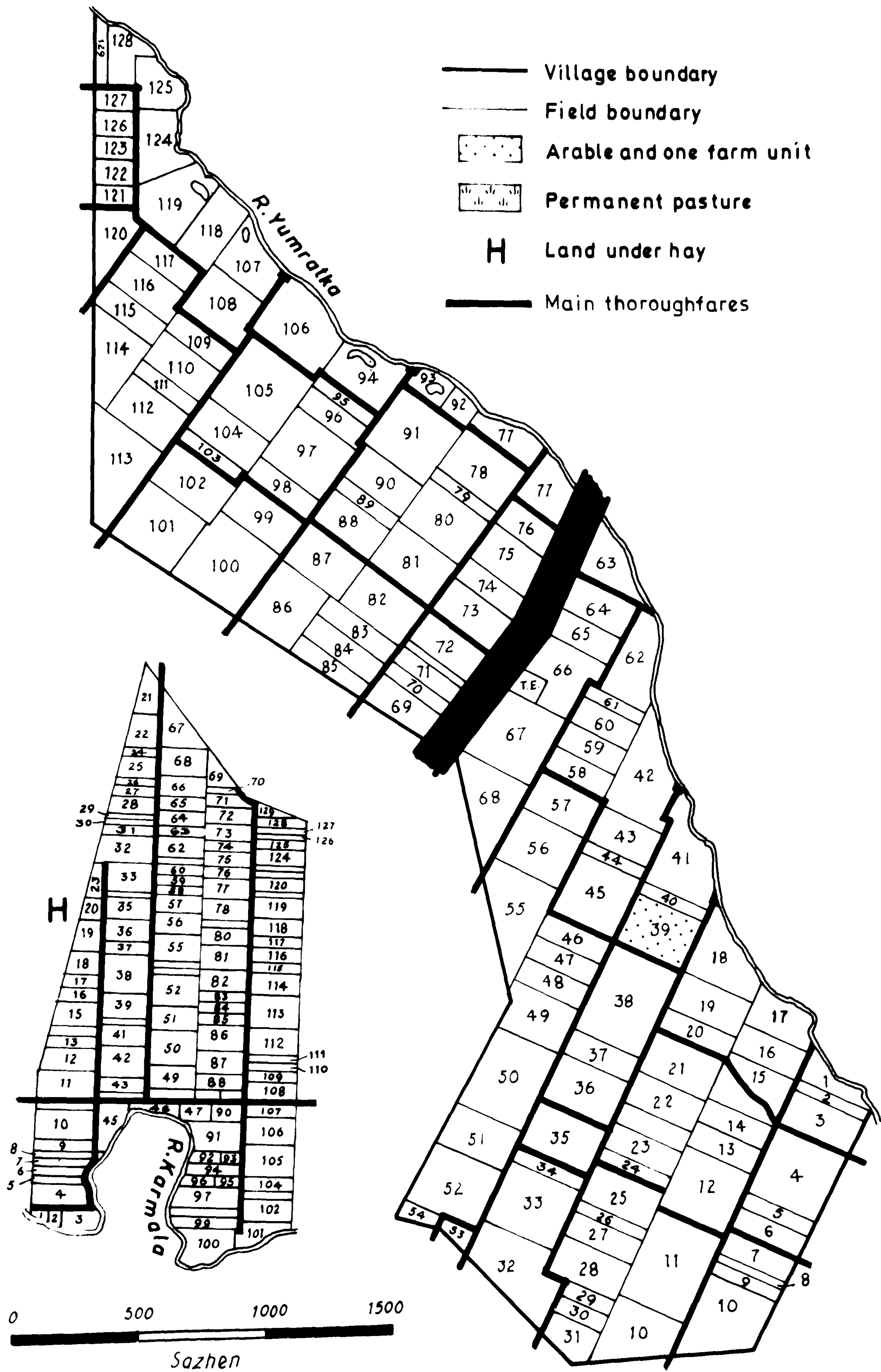


Fig. 20 – Grachevka village, Samarskiy uyezd, Samara, after communal enclosure into khutors

enclosure into three large fields which were sub-divided into a number of longitudinal strips. In each field the resident households held a series of land parcels distributed between the strips. In addition, there was an area of common pastureland surrounding the settlement area and, at a distance of 8 versts, hayland along the river Karmala which was subject to annual redistribution. In 1911 the Land Settlement Committee divided the arable, pasture and settlement area into one hundred and twenty nine separate, rectangular khutors, access to which was provided by new thoroughfares. It also divided the hayland into an equivalent number of parcels one of which was allotted to each household. The resultant farms therefore consisted of two parts - farmyard/arable and hayland. It would have been possible to transfer a number of the households on to the Karmala plot and form khutors there, but this idea was rejected on the grounds of the expense involved in moving the peasants' dwellings over a distance of 8 versts and of bringing into productive use hitherto unploughed land.

Borma village, also in Samara (Figures 21 and 22), shows the results of individual enclosure, albeit of a majority of households, and of the formation of khutors and otrub-hamlets on part of the land. The actual village, as Figure 21 shows, was situated on the left bank of the river Karmala and its land extended north to the river Konchurga and the Graninno ravine. Before enclosure, the arable of Borma was divided into nine large fields in each of which the two hundred and eighty six resident households held a number of parcels. As in Grachevka, the area immediately adjacent to the settlement was under permanent pasture and in the north along the river there was an extensive area of hayland and, in the ravine, scrub which served as pasture. In 1909, two thirds of the households decided to enclose, the remainder opted to remain in the commune. It was decided to leave the southern portion adjacent to the existing village settlement to the non-separators and to divide the northern portion into ninety nine khutors and eight otrub-hamlets. The result is shown on Figure 22. The scrub and hayland was apportioned between the non-separators, the khutors and otrub-hamlets in accordance with the number of 'souls', and an area of common pasture was established adjacent to each otrub-hamlet. As a result, the enclosed farms each consisted of three land parcels: arable, hayland and scrub and, in addition, the otrubs had the use of common pasture.

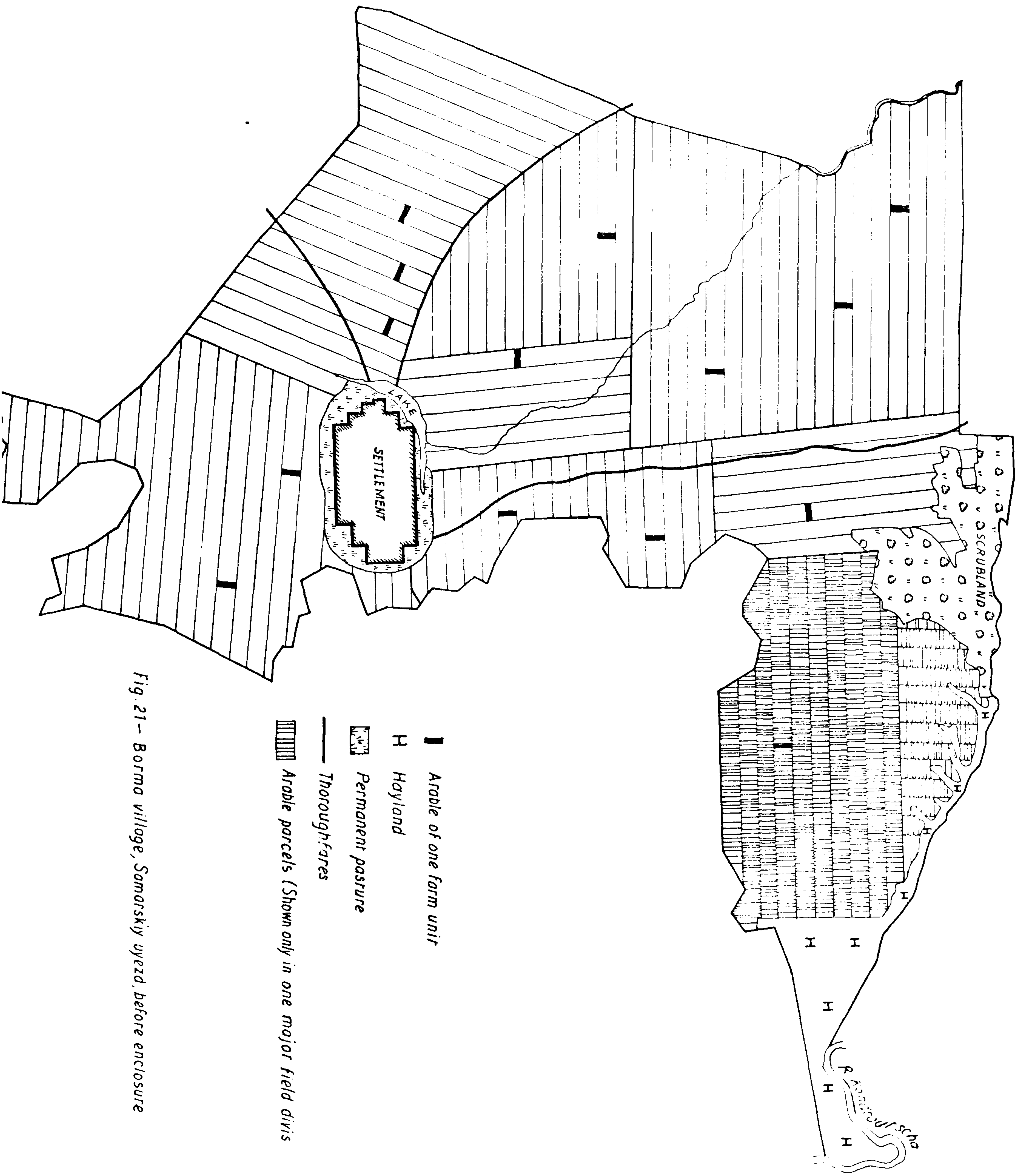


Fig. 21— Borma village, Somorskiy uyezd, before enclosure

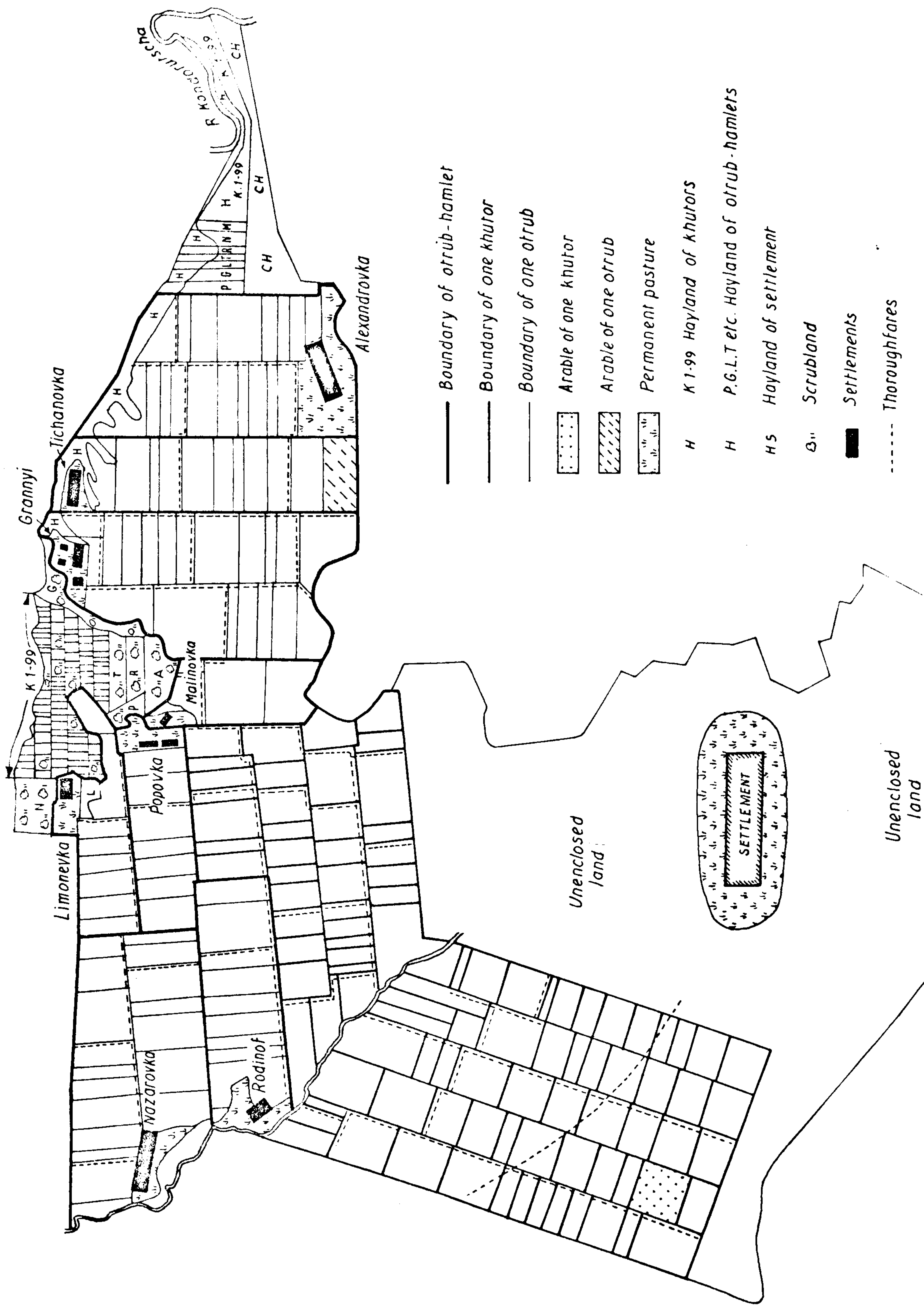


Fig. 22 - Borma village, Sarmarskiy uyezd after enclosure into khutors & Otrub hamlets

The two examples show how great were the changes effected in the spatial organisation of peasants' land as a result of enclosure. The potential for the development of an efficient system of farming on the farms thus formed, despite their 'defects', was obviously considerable.

III - 3. The Peasant Land Bank: its Contribution to Enclosure in the Three Provinces

Although the majority of enclosed farms in Russia came into being as a result of the consolidation of peasant allotment land, a number were formed on land purchased from the Peasant Land Bank. Before 1906, the principal task of the Bank had been to help alleviate peasant land-shortage by selling land on reasonable terms to communes and co-operatives of peasants or to individual households. After 1906, its policy was changed: henceforth the Bank was to help translate into reality the broad aims of the Stolypin Reform through selling land in the form of 'ready-made' khutors and otrubs to peasants in communes throughout European Russia. In order to carry this out, the Bank had to purchase land, usually the estates of the nobility, and divided them into self-contained farming units for resale. In the period immediately following 1906, the energy of the Bank was directed mainly towards the task of purchasing and 'preparing' estates and only from 1908 onwards did the sale of enclosed farms begin in earnest.

As Table 38 overleaf shows, the share of land sales from the Bank's own estates increased in Tver, Tula and Samara after 1906. Meanwhile, the amount sold with the Bank acting simply as the intermediary in the exchange of land between the nobility and peasants declined.

The contribution that the Peasant Land Bank made to the enclosure movement in the three Provinces, however, varied: (see Table 39 overleaf).

Its role was greatest in Tula where 30.6% of all enclosed farms existing in the Province by 1916 were on Bank land. Tula was in fact singled out by the Bank for special attention: "In provinces where the need for enclosure was felt to be most urgent", a report of 1910 explained, "the Bank obtained relatively more land than in those where such urgency was not felt. Therefore in Poltava, Kharkov, Tula,

Table 38

Land Sales by Peasant Land Bank in the Three Provinces
1906 - 1914 (10)

Year	% of land sold by P.L.B. from own estates			% of land sold by P.L.B. from estates of landed nobility		
	Tver	Tula	Samara	Tver	Tula	Samara
1906	1.1	5.6	N.D.	98.9	94.4	N.D.
1907	14.3	20.1	N.D.	85.7	79.9	N.D.
1908	8.6	32.6	84.4	91.4	67.4	15.6
1909	10.2	50.9	90.5	89.8	49.1	9.5
1910	17.5	48.8	66.5	82.5	51.2	33.5
1911	20.2	23.0	71.5	78.8	76.9	28.5
1912	20.0	7.1	86.9	80.0	92.9	13.1
1913	18.2	3.2	70.7	81.8	96.8	29.3
1914	21.7	9.4	87.9	78.3	90.6	12.1

Table 39

Land on which Enclosed Farms were Formed in the Three Provinces
1907 - 1917 (*)

Province	% of all enclosed farms formed on land of:				
	P.L.B.				
	commune	khutors	otrubs	total	crown
Tver	95.1	87.5	12.5	4.8	0.1
Tula	69.3	30.4	69.6	30.6	0.1
Samara	82.7	8.8	91.2	15.4	1.8
European Russia	79.4	27.2	72.8	19.1	1.5

*Dubrovskiy, op.cit., p.p. 585-588.

Kherson, Penza and Saratov the Bank increased its acquisitions of land by 75%"(8). In Tula, the Bank was in the position of being able easily to increase its fund of land available for liquidation as enclosed farms because in the wake of the 1905 uprisings, which were strongest in the provinces of the black-earth belt, many nobles were prepared to sell their estates at below the normal market price. Elsewhere this trend was less pronounced and the Bank's activities as an agent in the enclosure movement was, for instance, limited in Tver Province, khutors and otrubs on Bank land accounting for only 4.8% of the total. In Samara there was much land, principally that belonging to the crown, which was available for disposal, but the need to use it was not strong since enclosure of allotment land was widespread. In Samara, 17.2% of all enclosed farms were formed on Bank land.

The formation of enclosed farms on purchased land was far less complicated than on peasant allotment. The Peasant Land Bank did not have to redistribute fragmented holdings or divide up commons, nor did it have to satisfy the conflicting interests of different groups of peasants. In consequence it was in the position to form on its estates farms that conformed very closely to the 'ideal'. The propaganda role of the Bank in the enclosure movement was thus stressed: "On land liquidated by the Bank" the annual report for 1907 explained, "it is important to create models of the new type of farming unit based on the principle of individual ownership, and to demonstrate their suitability for the productive use of the land" (9). In view of this statement it is interesting that khutors, while relatively more numerous, were nevertheless outnumbered on Bank land by otrubs. Evidently the Bank experienced the same difficulties in forming khutors as did the Land Settlement Committees:

(see Table 40 overleaf)

Table 40

Type of Enclosed Farms Formed on the Land of the Peasant Land
Bank in Selected Uyezds of the Three Provinces

Of enclosed farms on land of the Peasant Land Bank			
% of which:			
Uyezd and Province	khutors	otrub-hamlets	otrubs
Nikolayevskiy (3)	2.2	97.8	0.0
Samara Province*	8.8	92.2	
Yepifanskiy (3)	25.5	16.7	57.8
Tula Province*	30.4	69.6	
Tver	12.5	87.5	

*Dubrovskiy, op.cit., p.p.585-588

The figures that the Bank released relating to the number of khutors it sold must be accepted with caution. In the 1911 census Yepifanskiy uyezd it was recorded that only 69.4% of purchased khutors were occupied on a permanent basis - the rest were occupied only periodically or not at all. The Bank had a very broad definition of what constituted a khutor. Evidently it considered that as long as a building, even if it were a simple hut for storing equipment, was put up on the land a khutor had come into being. The Bank sold most of its land on the understanding that "at some time in the future" the purchaser would move on to it. As the figures from Yepifanskiy testify, this often did not happen.

In Samara, water-shortage constituted an obstacle to khutor formation on Bank Land, as it did on allotment. Following the example of the Land Settlement Committees, the Bank consequently created otrub-hamlets on its estates. Figure 23 shows the sub-division of a noble's estate by the Bank in Nikolayevskiy uyezd. The 10,480 desyatinas of the estate were divided between twelve hamlets, in each of which the Bank sunk a well, and twenty one khutors; in the north of the estate an area of land was left unenclosed and sold to seventeen peasant co-operatives. An interesting feature revealed by the plan of the

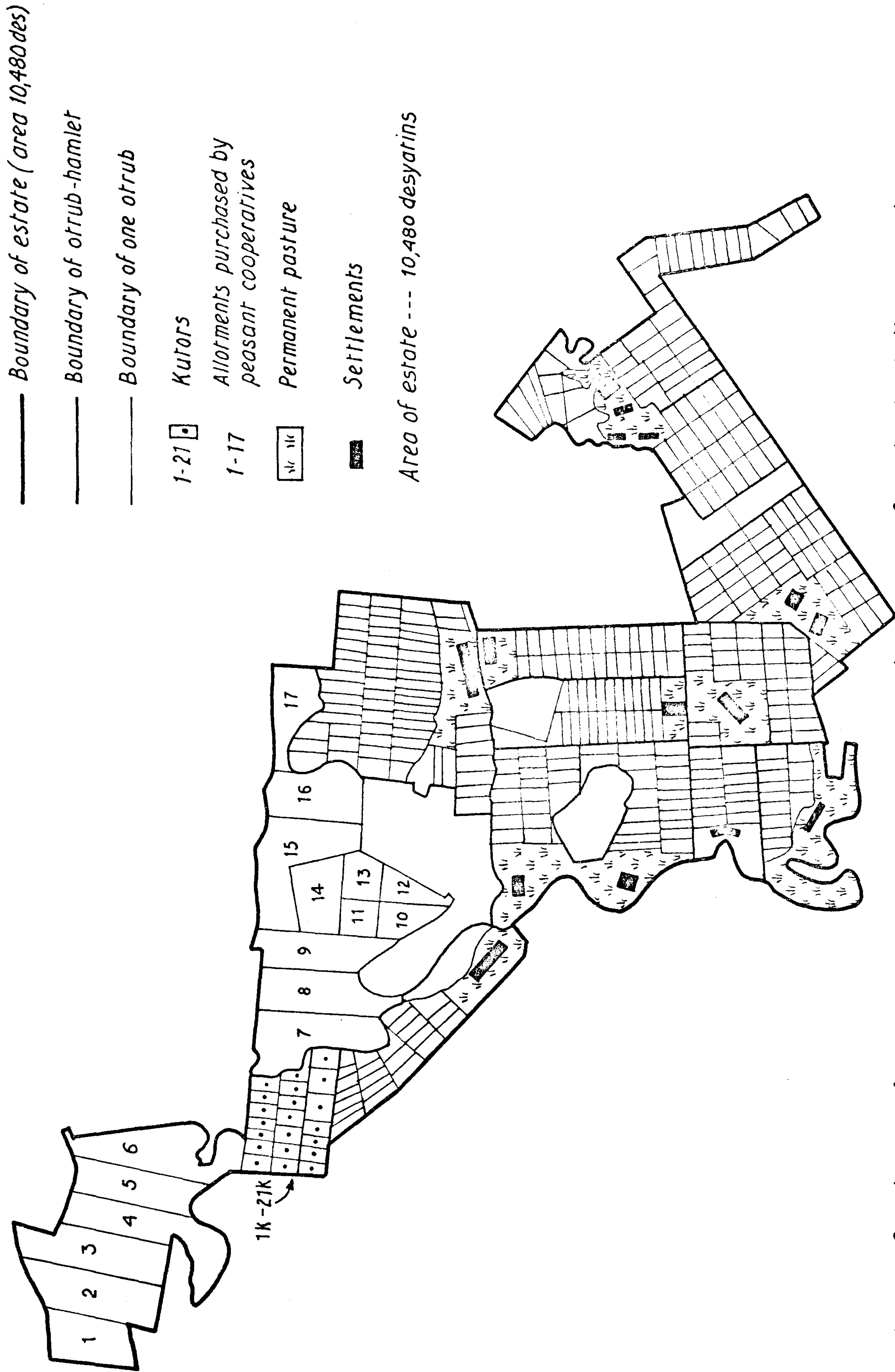


Fig. 23.— Subdivision of an estate of the Peasant Land Bank into Khutors & Otrub-hamlets in Nikolayevskiy uyezd, Samara

estate's sub-division is that the Bank had laid out next to each hamlet an area of pastureland for the joint use of all households; and these were meant to be model enclosed farms. This would seem to emphasise the strength of the communal tradition, such departures from the model presumably being forced on the Bank by the purchasers.

The purchase of an enclosed farm did not necessarily mean that the peasant severed his ties with the commune or gave up his allotment land. In Nikolayevskiy uyezd, over one half and, in Yepifanskiy, nearly all the peasants who purchased enclosed farms retained some 'unorganised' (i.e. communally owned) land:

Table 41

Common and 'Unorganised' Land in the Use of Enclosed Farms
in Nikolayevskiy and Yepifanskiy Uyezds (3)

Uyezd	% number of farms retaining rights in common	% of all pasture in use to farmers held in common	% number of farms retaining 'unorganised' land	% of all land in ownership 'unorganised'
Nikolayevskiy	91.5	88.0	52.0	22.9
Yepifanskiy	24.0	49.1	91.5	27.8

This begs the question of whether the purchased parcels were in fact enclosed farms in the agricultural sense. Much obviously depended upon the way in which the purchased land was used by the peasant - whether it was farmed as a separate unit or whether it was used simply to supplement production on the allotment in the commune. The evidence would seem to suggest that more often than not the latter was the case and that many of the plots of land sold by the Peasant Land Bank as enclosed farms differed little from other plots of land sold to the peasants.

III - 4. Other Enclosed Farms: the Special Case of Samara Province

In any discussion of enclosure in European Russia attention is inevitably focused on the farms that came into being under the provisions of the Stolypin Legislation. In some provinces, however, enclosed farms were not a new phenomenon but had arisen or been introduced at an earlier date. Often these farms differed from those of the later period, but the differences were in detail not in concept. Such farms deserve consideration because some had been in existence for fifty years before the introduction of the Stolypin Reform and they can give some indication of the impact over a long period of the principles of 'individualisation' and 'consolidation' on the system of peasant farming.

Of the Provinces under investigation, enclosed farms of pre-1906 origin were found in significant numbers only in Samara. These farms had very diverse origins, but they can be divided roughly into two groups: those that were introduced as part of state programmes and those that arose as a result of the grass-root's initiative of the peasants themselves. The former group conformed to a clearly defined pattern which the authorities considered, rightly or wrongly, to be best suited to conditions in Samara. The latter, since they arose spontaneously, were more diverse in form.

III - 4a. Official Enclosure Programmes prior to 1906

The first attempt to introduce individualised farming into Samara took place before the Emancipation Act. In 1846 a measure was passed to settle Russian peasants on land formerly held by the Cossacks. Eleven villages were founded in Stavropolskiy uyezd and one hundred and forty two in Samarskiy specifically for peasant families from the densely populated central black-earth belt. Each family was allocated in hereditary ownership 38 desyatinas of arable land, a parcel of hayland and one under wood and, in addition, some grain and 95 - 140 rubles. The farms that thus came into being were called semeynyee podvorniye uchastki - hereditary family farms.

The intention behind the programme was to introduce into Samara farming units which would serve as examples to the local peasants of the superiority of individual over communal endeavour in farming. However, wary of the communal instincts of the settlers, the initiators of the scheme felt bound to organise the distribution of the land strictly and to lay down restrictions regarding crop rotations that would make any return to the traditional system impossible. Also, in order to ensure that each farm passed down undivided from one generation to the next, it was laid down that the principle of primogeniture should operate on inheritance.

The arable land in each village of settlers was laid out in one of two ways: either in 'ribbons' (lenti) or 'squares' (karti). The former, more common, organisation, is illustrated in Figure 24, a plan of Vvedenka village. The land in Vvedenka was divided into a series of bands, equivalent in number to the households in the village, which extended from the farmyard to the furthest boundary. Each band was divided into eight fields and was owned and worked individually by a single farmer. Such farming units resembled the khutors of 1906 in that all the arable was held in a single parcel adjacent to the owner's dwelling but in many respects they were far from satisfactory for efficient farming. The average length of bands was 182 sazhen, but there was considerable variation from one village to the next - in one they extended for no less than 6 versts.

The alternative form of organisation, in squares, is illustrated in Figure 25, of Tukshum village. All the arable was divided into eight strips and in each every household held one field, the number of fields in a strip corresponding therefore to the number of households in the village. The fields were distributed so that every household held one at the outer perimeter, one further in and so on, the aim being to ensure that none had an unfair advantage over its neighbour. Although such farms may have resembled those in the commune, they differed in that their fields were not repartitioned periodically.

The villages with farms in hereditary family tenure were all concentrated together and occupied large areas of whole volosts. Figure 26 shows the organisation of a group of such villages in Petropavlovskiy volost. The majority of the holdings were in 'ribbons' but in six villages (Nos. 5, 9, 10, 12, 14 and 15) they were in 'squares'.

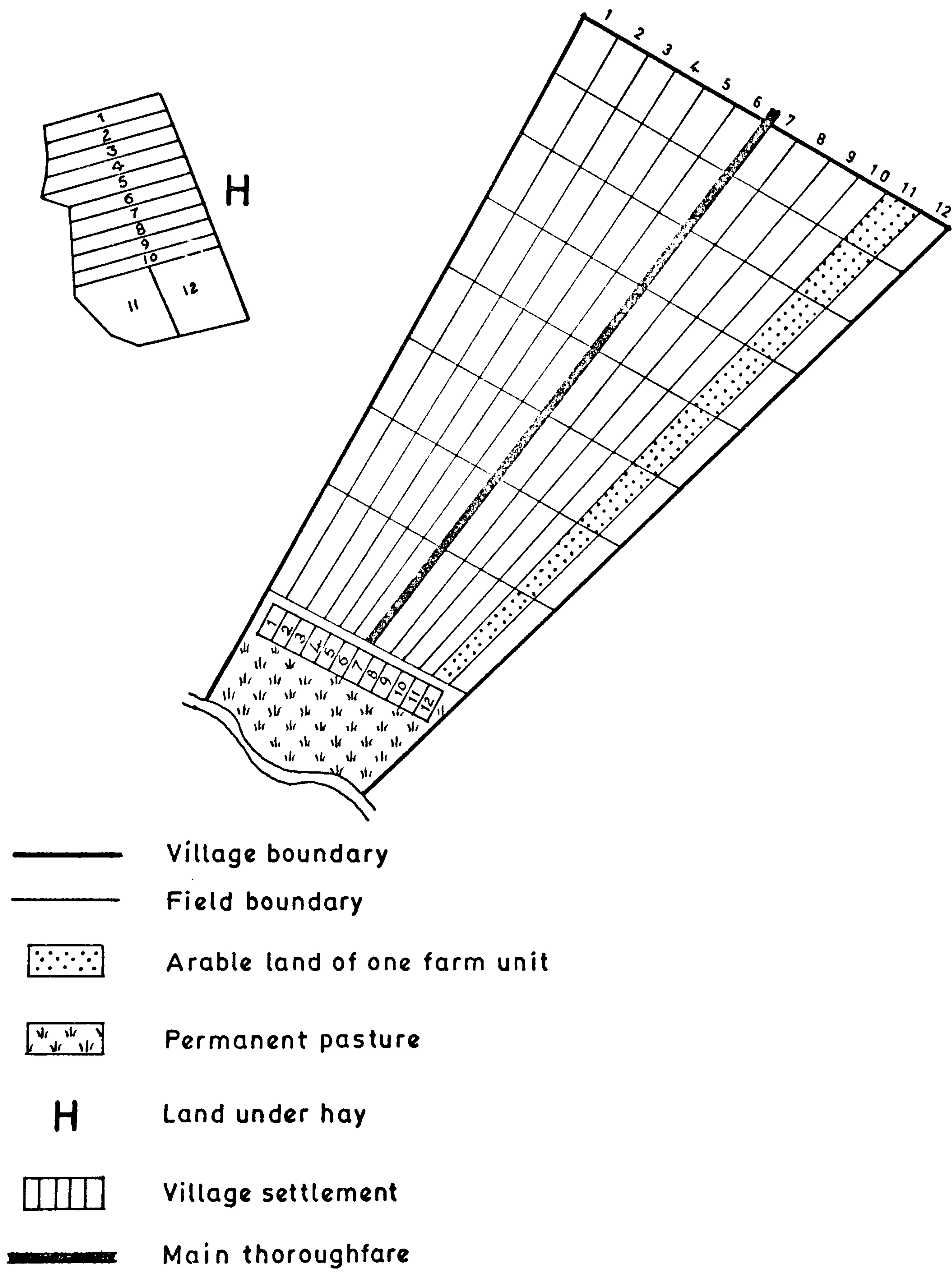


Fig. 24 – Plan of Vvedenka village, Samarskiy uyezd, hereditary family farms organized in Lenti

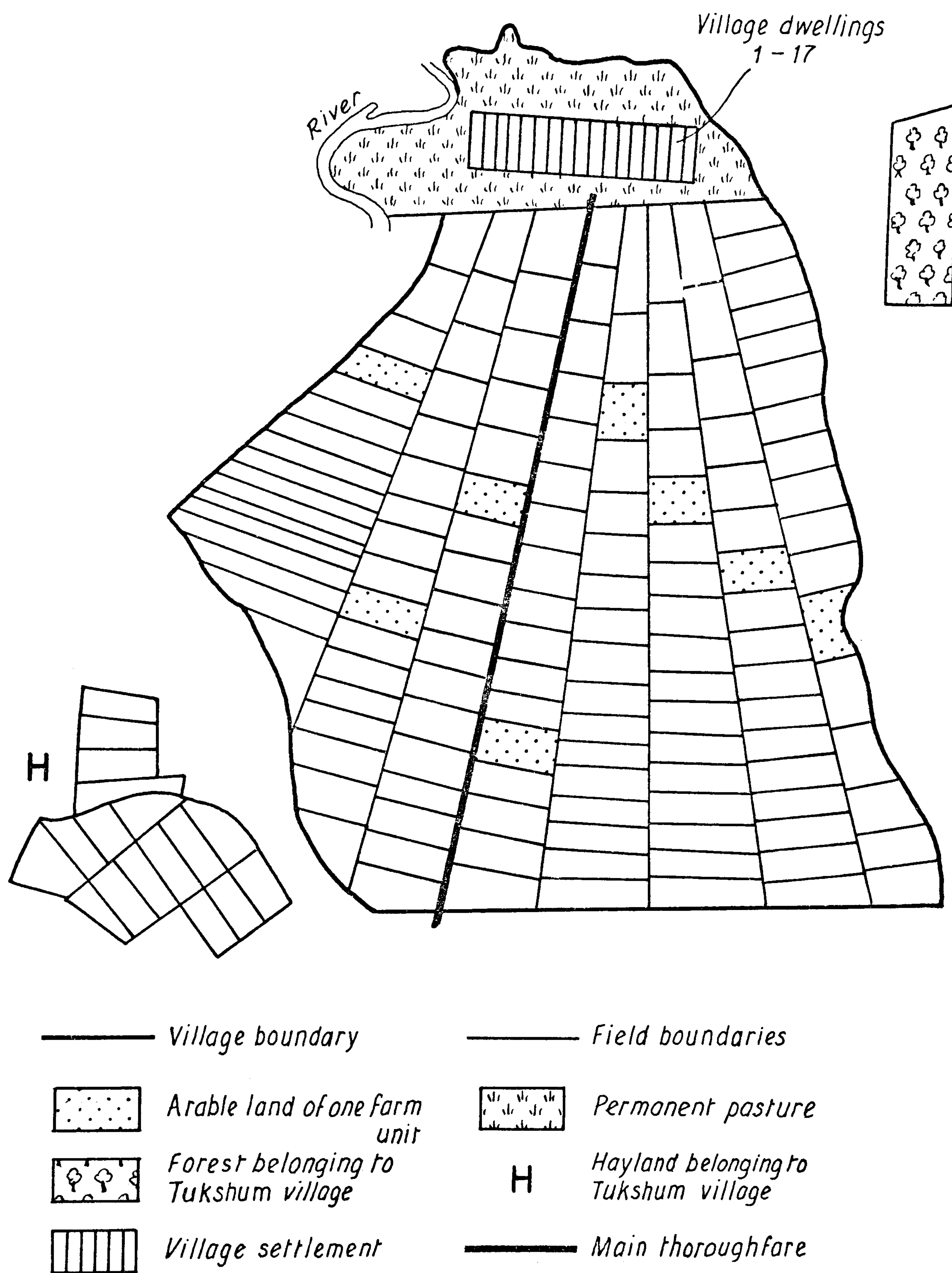


Fig.25 – Plan of Tukshum village, Samarskiy uyezd – hereditary family farms organized in Karti

The hayland belonging to each village was situated in the west of the volost along the banks of the river Kondurga; although it was adjacent to some villages it was up to 15 versts away from those in the east.

Every household with a hereditary family holding was expected to adopt on its land an eight-field rotation with two fields under grain annually and the remainder under fallow. This rotation, although in the light of subsequent developments wasteful of land, was at the time judged to be the most appropriate for the soil and climatic conditions of Samara Province.

Whether the hereditary family farms in Samara Province can be termed khutors or otrubs is of course open to question, but they certainly had more in common with them than with farms in the commune. Certainly this was the view of a zemstvo official investigating conditions of farming in Samara in 1910: "If we ignore the fact of the obligatory rotation", he wrote, "then in effect we see here in existence for already over 50 years the prototype of the individualised, enclosed farms which are now growing up around us" (10).

The zemstvo official was in all probability referring only to those of the hereditary family holdings that had succeeded in retaining their original form. Many underwent significant changes during the half century of their existence as increases in population meant that additional parcels of arable, hayland and forest had to be allotted to many villages. Such secondary land allotments often were located at a considerable distance from the primary allotments, but they were also divided into ribbons or squares. In Petropavlovskiy volost, ten out of eighteen villages for which data are available had by 1910 received secondary allotments, but only four of these had been settled. As a result, some households held their arable in two entirely different locations.

By far the greatest change in the form of the hereditary family holdings, however, came in the wake of the Emancipation Act which negated the 1846 Decree about primogeniture. Henceforth, households could sub-divide land between heirs. The results were far reaching - the previously consolidated farms became highly fragmented. One example will suffice: in Sukhoy Ugol' village a peasant in 1909 inherited one-eighth of a farm but this one-eighth was distributed between the primary

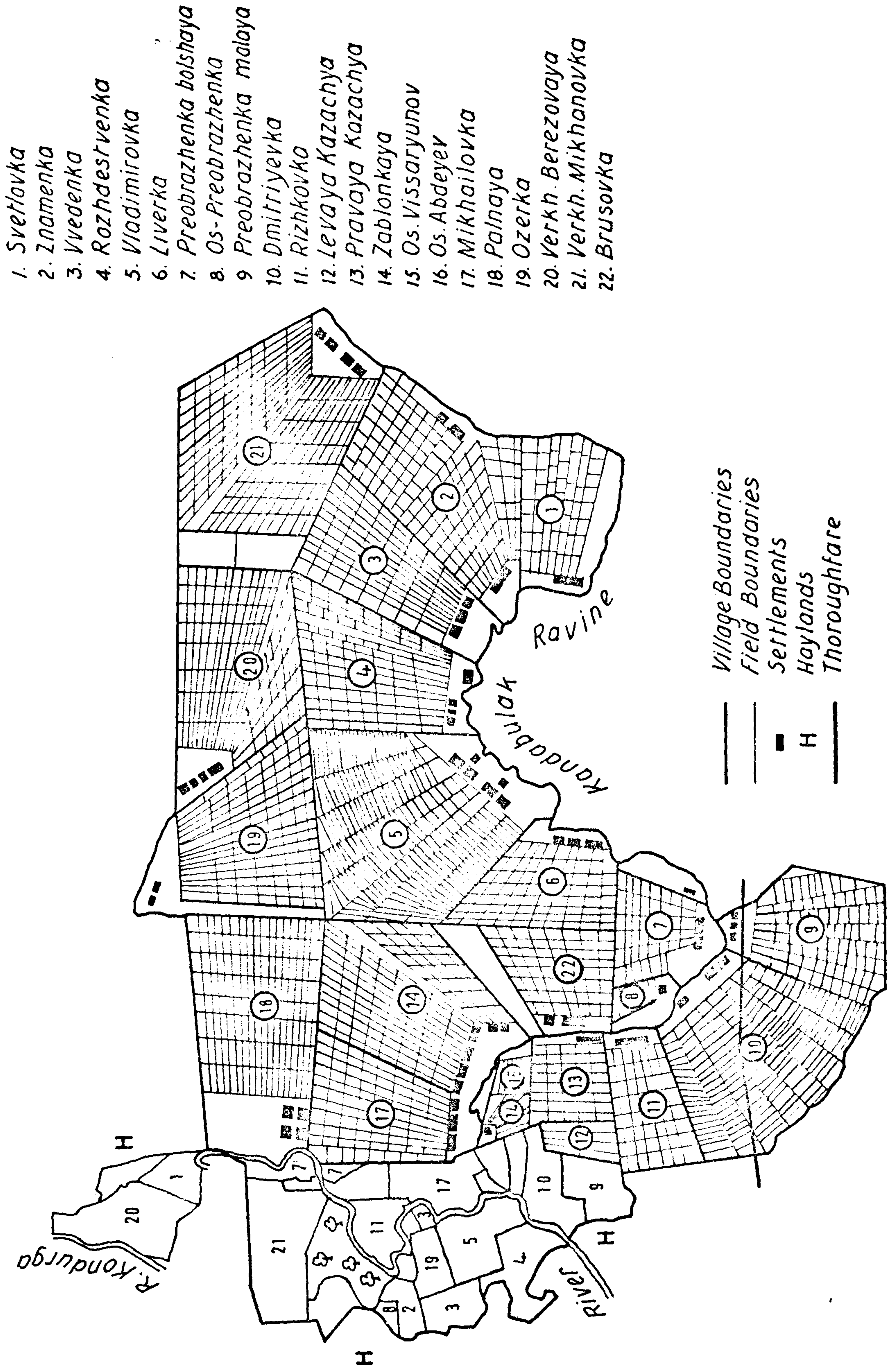


Fig. 26 - Plan of Petropavlovskiy volost, Samarskiy uyezd

and secondary allotments; since the land on both was organised in 'squares' the peasant in effect inherited no less than twenty one separate parcels of land (11). Not all the hereditary family farms became as fragmented as the one described above. Where land was organised in 'ribbons' fragmentation was usually less severe and in some villages it was avoided altogether. Nevertheless, the experience of the farms after the change in the inheritance law should have acted as an object lesson to the reformers of 1906, but it was one that went unheeded initially.

Another, and as it transpired, more successful attempt to introduce individualised farming into Samara Province took place in the middle of the nineteenth century, when the Ministry of State Properties was directed to compile plans for the establishment of settlements for Mennonite settlers from Germany. The aim behind the programme was to "create in the Province model farms to act as examples to the indigenous population" (12). The majority of Mennonite farms were established in two volosts: Alekhsandratal'skiy in Samarskiy uyezd and Malishinskiy in Novouzenskiy uyezd.

In Alekhsandratal'skiy volost, 30,000 desyatinas of land were divided between ten settlements or koloniyas. Each Mennonite household or more than two adult members was allotted a farm of 65 desyatinas in hereditary tenure, while smaller households received 32 desyatinas. Every household had, in addition, the right to rent any land remaining unallocated. The same rules pertained to the Mennonites in Malishinskiy volost, except that here the land allotments were larger - over 70 desyatinas. The first Mennonite settlers arrived in Samara in 1854 and within ten years there were one hundred and seventy eight families in Alekhsandratal'skiy and two hundred and thirty six in Malishinskiy volosts. The Mennonites were entitled to bring with them their normal household articles and agricultural equipment and 100 rubles worth of capital. They could also be accompanied by non-agricultural artisans numbering not more than one per three farming households in order to keep the kolomiyas supplied with the implements and goods with which they were familiar.

The land of each Mennonite household was held partly in common - marshes, wood and wasteland - and partly individually - the arable, hay and pasture. The individually owned land was usually in a single unit and lay adjacent to farm buildings and appurtenances. The various forms that the Mennonite farms took are shown in Figures 27 - 29.

In Alekhsandratal'skiy koloniya (Figure 27, Nos. 1-25) the peasants' dwellings were aligned along a single thoroughfare and the land of each extended in a longitudinal band to the north and south. The shorter of the two bands was under permanent pasture and the longer, to the north, under arable, which was divided into as many fields as were required by the rotation adopted by the farmer. Most of the koloniyas in Alekhsandratal'skiy volost conformed to much the same plan with the village thoroughfare dividing the land of each household into two halves but, depending on the spacing and location of the individual dwellings in the village, the holdings thus formed could be of different shapes. In the dispersed koloniya of Grotsfeld, they approximated to a square, as they did also in Murovevka and Mariental.

In Lizandberg koloniya, Malishinskiy volost (Figure 28), the organisation of the land was a little different. Here the farmers' dwellings were located exactly half-way along the band constituting the landholding. The distance to the outer perimeter was exactly 2 versts in both directions. All the land situated on one side of the thoroughfare was arable, but so was a portion on the other. The intention of such a plan was to reduce the distance that had to be covered to the furthest arable field.

Like many of the khutors created after 1906, some of the Mennonite farms consisted of more than one land parcel. This was due in some cases to the hayland being situated away from the village settlement in a river valley (e.g. in Naigofung, Grotsfeld and Mariental, Figure 27) or to the acquisition of secondary land allotments after the main allocations had been made (Alekhsandratal'skiy). When the dwellings in a koloniya formed a double row along the main thoroughfare, as was the case in Frezengiyem (Figure 29), the usual organisation of the land was not possible. In Frezengiyem, some households held as many as four separate parcels of land and, in addition, they had the right to the use of the common pastureland. Common pasture was not usually found in

- Kolonia boundary
- Khutor boundary
- == Thoroughfares
- Dwellings

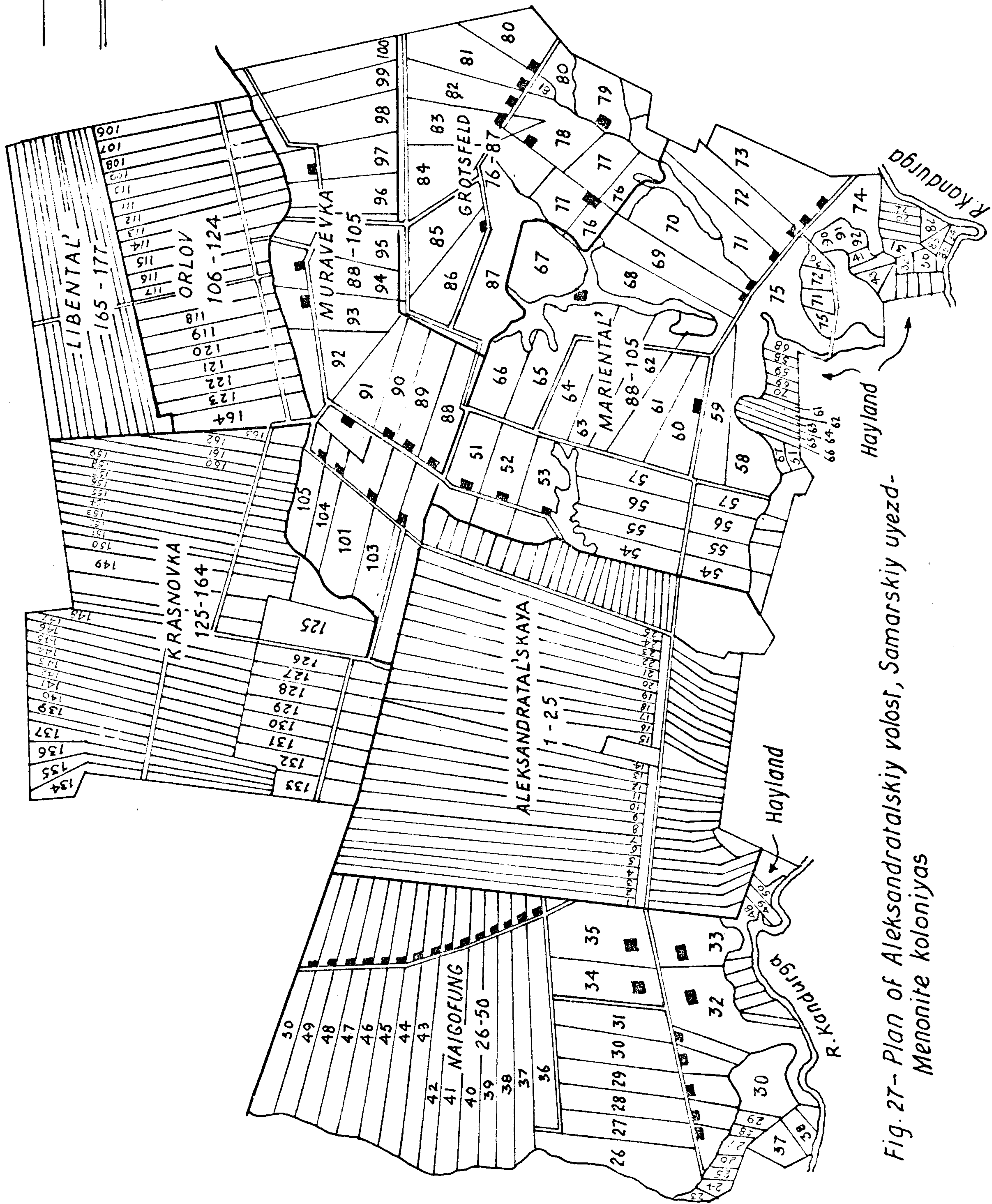


Fig. 27— Plan of Aleksandratal'skiy volost, Samarskiy uyezd—
Menonite koloniyas

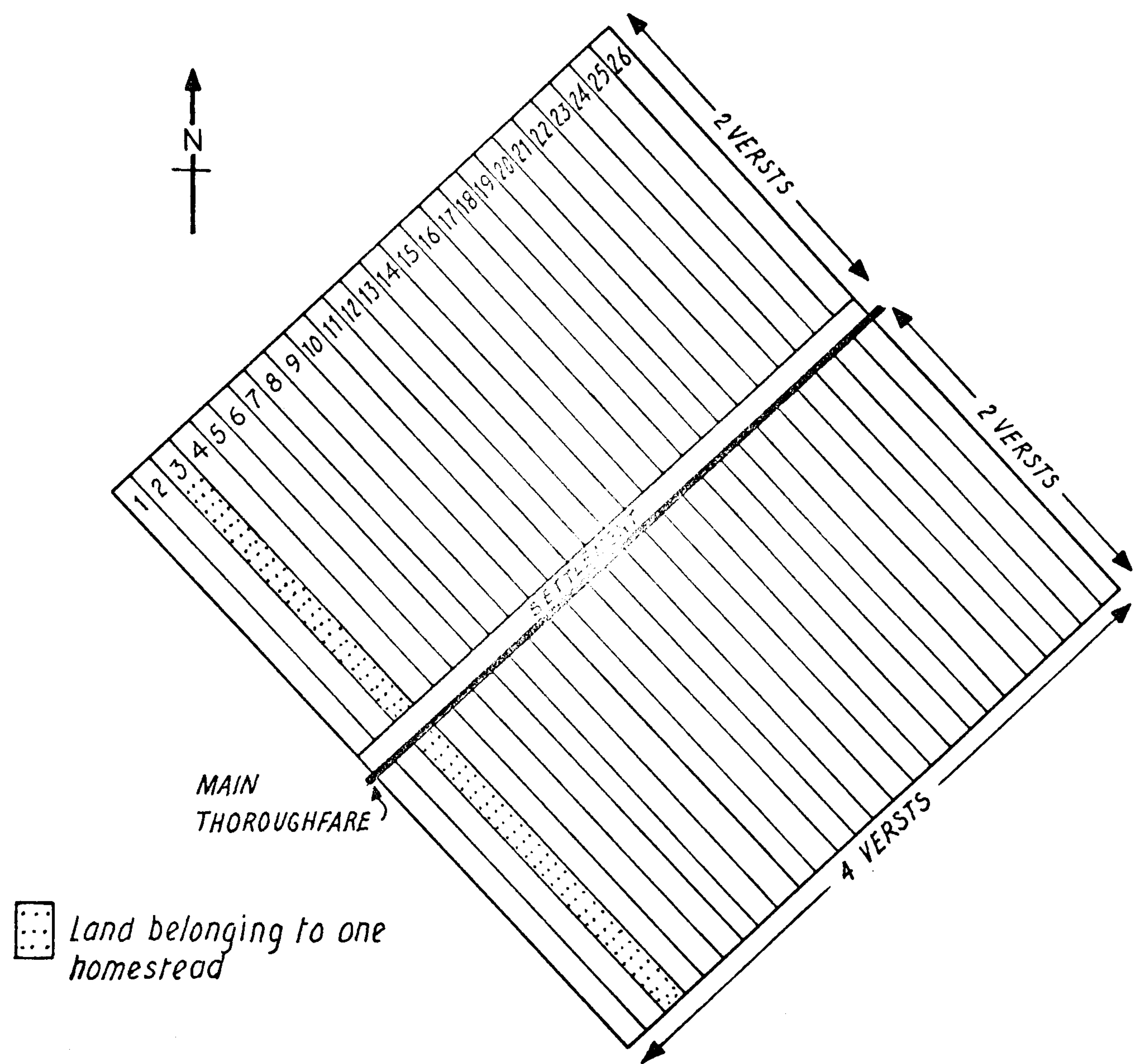


Fig.28 – Plan of Lizandberg Koloniya, Malishinskiy volost, Novouzenskiy uyezd

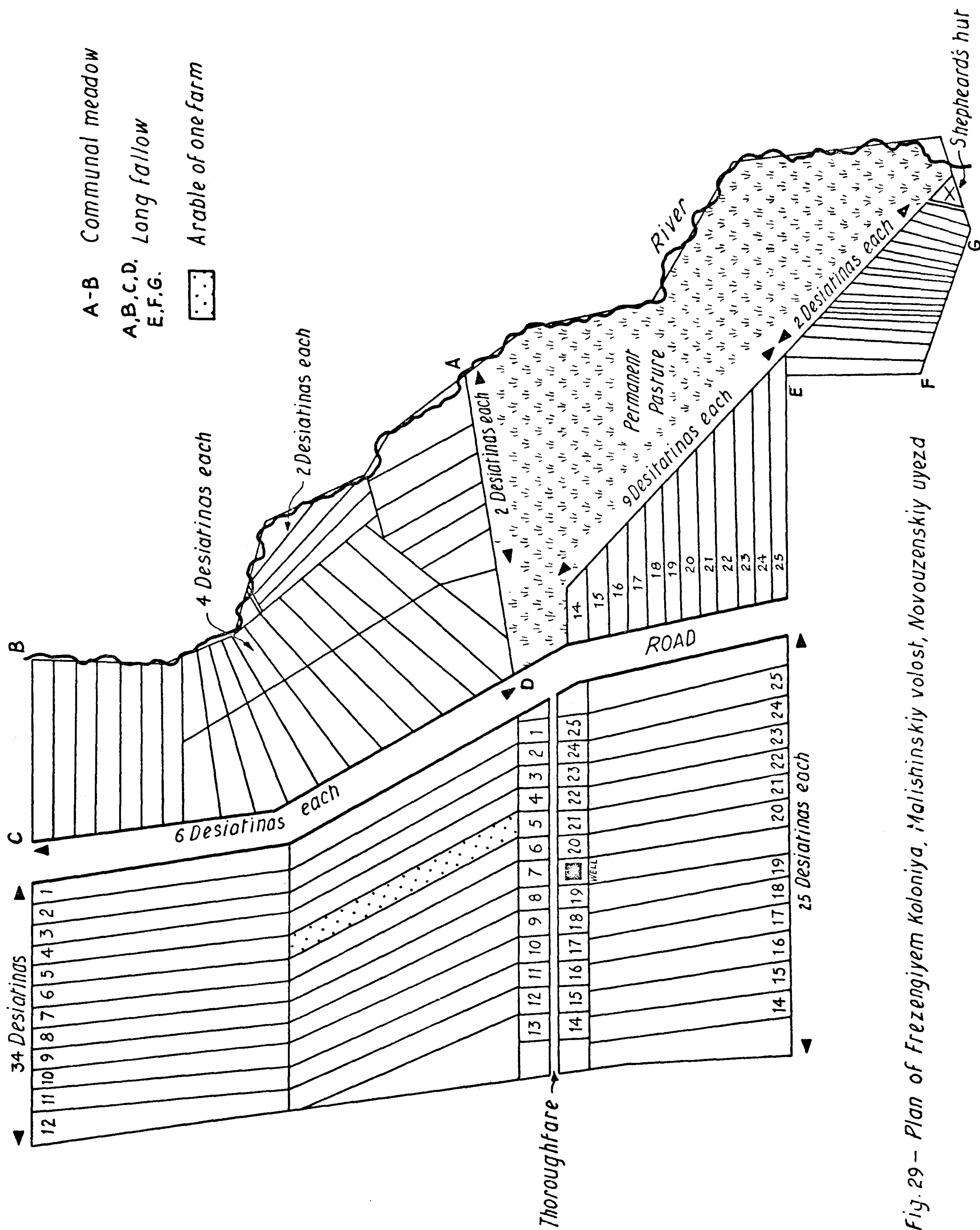


Fig. 29 – Plan of Frezengiyem Koloniya, Malishinskiy volost, Novouzenskiy uyezd

the Mennonite koloniyas and apart from Fresengiyem it was recorded in only one other.

The inheritance customs of the Mennonite settlers were such that farms remained undivided. On the death of the owner, it was usual for the farm to be passed to a single heir, the son considered by the deceased to be the most capable farmer; this regardless of whether he was the eldest. The remaining heirs had to be compensated by the recipient of the farm with money equivalent to the value of the land they would otherwise have inherited. While the fragmentation of holdings was thus avoided, the custom meant that often the new owner was burdened with considerable debts and this sometimes resulted in his having to sell off a portion of his land. Eventually, if farming turned out to be unprofitable, an heir might be forced to liquidate the whole of his farm in order to meet all his obligations. In this way, land frequently entered the market to be purchased by other, more successful, Mennonites.

The process of the concentration of land in the hands of successively fewer Mennonite farmers was inevitably accompanied by an increase in the number of land parcels per farm and rarely was the purchased parcel adjacent to the land of the purchaser. Thus, like the Russian peasant holdings, the Mennonite farms became successively more 'fragmented' over time, but there was the important difference that this took place as a result of acquisition of land rather than its sub-division:

Table 42
Land Parcels per Household on Mennonite Farms
1854 - 1897 (11)

Number of land parcels per farm	1854		1888		1897	
	total number households	%	total number households	%	total number households	%
1	211	100.0	102	61.8	58	38.2
2	-	-	48	29.1	53	34.9
3	-	-	11	6.7	18	11.8
<4	-	-	4	2.4	23	15.1
Total	211	100.0	165	100.0	152	100.0

The final serious attempt to introduce individualised farming into Samara Province prior to 1906 took place in 1895 when the Administration for Appanage lands decided to rent land in two appanage estates - the fourth Nikolayevskiy and fifteenth Androvskiy - in the form of separate farm units to peasant migrants from central European Russia. On the appanage lands forty one new hamlets were founded. The intention with this experiment was the same as with the previous ones; to introduce into Samara farms which could act as models for the local peasant farmers to emulate. Like the hereditary family farms, the farms on the rented appanage land could not be considered true khutors and otrubs by the later definitions, but they were significantly different from the normal peasant farms in the commune. Each farm consisted, as Figure 30 of Mekkerovskiy hamlet shows, of three separate parcels of arable and every household had, in addition, the right to use the common pasture land adjacent to the settlement area. It was laid down in the rental contract signed by each recipient of a farm that the organisation of the land should not be changed and that no sub-division of the arable should take place. Initially each peasant signed a contract for twenty four years but it was understood that so long as the various restricting covenants (p.309) were adhered to this would be extended indefinitely. Provision was also made for the transfer of the farm to a single heir if the original leasor should die or decide to retire from farming. Farming on each farm was to take place individually.

The rented farms on appanage land represented something of a compromise between peasant farms in the commune and completely consolidated otrubs formed after 1906 but Slobodchikov, the chairman of the Samara Land Settlement Committee, did argue in 1909 that "in concept ... (they were) very similar to the present day otrubs" (13). However, he continued to note that many had since their formation become fragmented, despite the attempts to prevent this, which, he argued, "occurred as a result of attempts by several settlers in the hamlets to equalise their land holdings through annual repartitions of land voluntarily agreed upon by the renters themselves" (14). "This", Slobodchikov went on to observe, "has led to some groups of rented farms becoming barely distinguishable from those in the commune" (15). Indeed by 1909 approximately one half of the farms on rented appanage land in the Nikolayevskiy estate had been sub-divided into five or more separate land parcels.

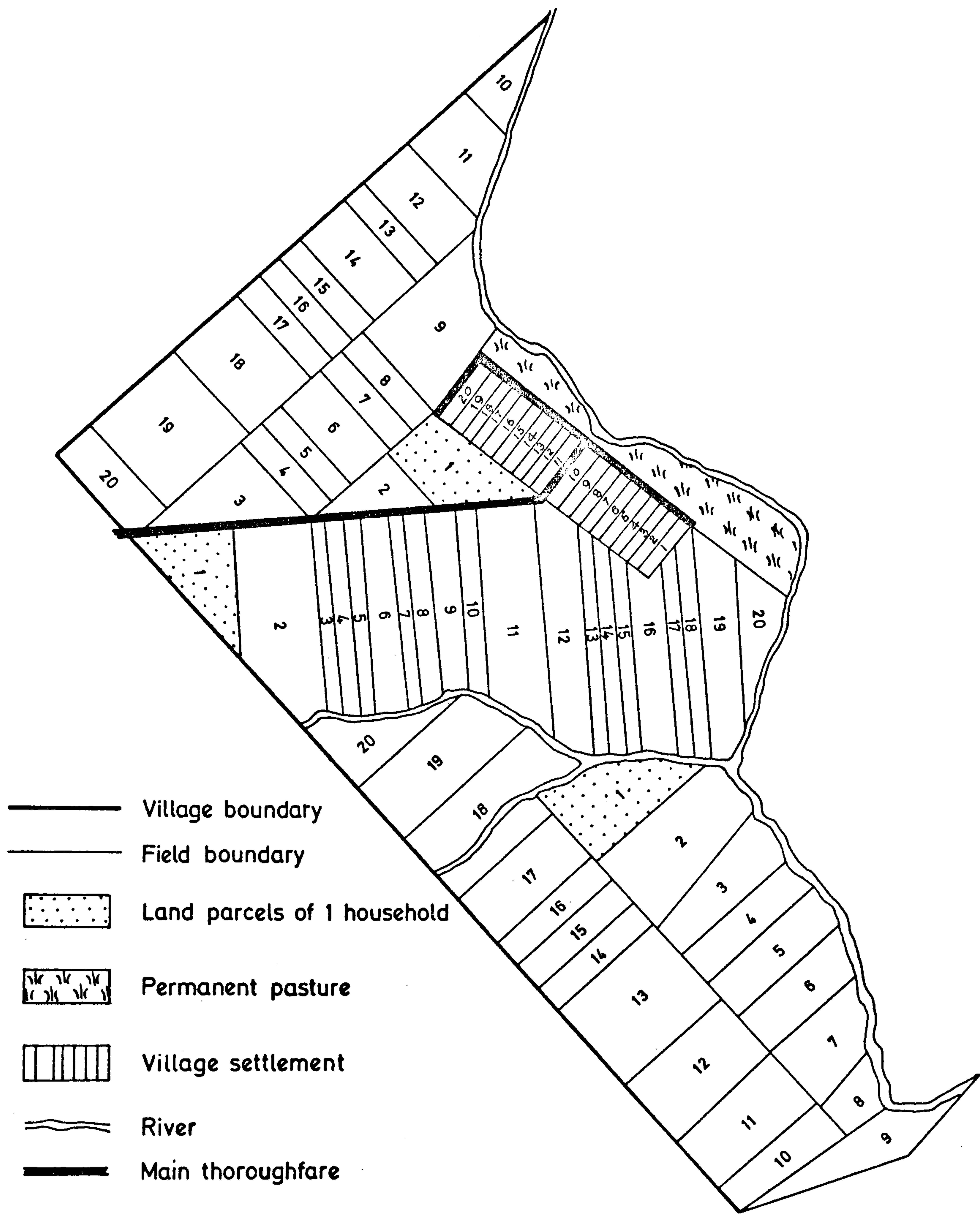


Fig. 30- Plan of Mekkerovskiy hamlet on rented appanage land, Nikolayevskiy uyezd.

Table 43

Land Parcels per Household on Enclosed Farms Formed on
Rented Appanage Land, 1909 (11)

Number of land parcels per farm	% number of farms
1 - 3	18.5
4	11.1
5	40.7
6	18.5
>	11.2

Thus the experience of the farms on rented appanage land was similar to that of the hereditary family farms, demonstrating the strength with which peasants clung to their traditional system even in the face of legal compulsion to do otherwise:

III - 4b. Enclosed Farms in Samara arising Naturally Prior to 1906

Individualised farming units were not only introduced 'from above' in Samara prior to 1906, some arose as a result of the initiative of the peasants themselves. By the dawn of the twentieth century, there existed in all uyezds of the Province, khutors and otrubs side by side with the fragmented peasant farms in the commune.

Perhaps the most interesting of the 'naturally arising' enclosed farms were those in the southern volosts of Novouzenskiy uyezd which developed within the legal framework of the commune. The three-field system which compelled peasants everywhere else to hold their land in no less than three places and to conform to a strict communally decided rotation, was not widely developed in communes in the uyezd. Instead, many peasants held their land in a single parcel which sometimes they settled or occupied for at least part of the year, and, as a zemstvo agronomist explained, "as a result the individual initiative of the peasant farmer is not repressed" (16). Isolated from their neighbours for part of the year and not obliged to follow a compulsory rotation, the peasant farmers were able to work their land as they chose. Such farms, although not legally the property of the

individual farmer, in almost every other respect resembled the later khutors and otrubs.

Other enclosed farms were formed in Samara as a result of freed peasants from the central Russian provinces establishing themselves on rented or purchased land. Many such migrant farmers were to be found in the southern uyezds of the Province where land was still relatively abundant and cheap. Finally, a certain number of enclosed farms arose in Samara prior to 1906 as a result of local peasants, having paid off their redemption debt, withdrawing from the commune. Such, however, were not numerous - in Samarskiy uyezd, three hundred and seventeen households redeemed their land after 1861 but only twenty of these subsequently enclosed.

III - 5. Summary

It is evident that the enclosure movement met with differing degrees of success in the three Provinces. In terms of the number of enclosed farms that had come into existence by 1917, Samara very definitely must be ranked first: both before and after 1906 there was a clear trend towards the creation of individualised farming units in the Province and, by 1917, so the evidence would suggest, the commune had been forced into a decline. In Tver and Tula, the record was much less impressive and in neither can the enclosure movement be considered to have 'taken off' by the time of the Revolution. In both Tver and Tula however, Group Land Settlement won popular support and its importance in helping to solve some of the problems of the contemporary farming scene, whatever the Government's attitude towards it may have been, must not be underestimated.

Where the actual farms themselves were concerned, the most notable feature to emerge from the present investigation is the great diversity of form that they could take. Nowhere did the enclosed farms in any great numbers measure up to the ideal of the authors of the Stolypin Reform but, paradoxically, they probably came nearest to it in Tver. In Samara there evidently were obstacles to the formation of farms of the type deemed desirable by the Government.

NOTES TO CHAPTER III

1. Pamyatnaya Knizhka Samarskoy Gubernii za 1909, Samara, 1910, p.62.
2. Kofod, A., Russkoye Zemleustroystvo, St. Petersburg, 1914, p.108.
3. Pamyatnaya Knizhka (1909) op.cit., p.74.
4. Pamyatnaya Knizhka Samarskoy Gubernii za 1911, Samara, 1912, p.22.
5. Zemleustroyennyya Khozyaystva. Svodnyye Dannyye Sploshnogo po 12 Uyezdam Podvornogo Obsledovaniya Khozyaystvennogo Izmeneniya v Pervyye Gody Posle Zemleustroystva, G.U.Z.i.Z., St. Petersburg, 1915
6. Mozzhukhin, op.cit., p.p. 302 - 303.
7. Ibid., p.p. 207 - 210.
8. Ocherk Agrarnoy Politiki Tsarskogo Pravitel'stva v Svyazi s Obsorem Deyatel'nosti Pokupshchikov Vyvedivshikhsya na Uchastkakh Vladeniya v Imeniyakh Krest'yanskogo Pozemel'nogo Banka za 1910, Ts.G.I.A.L., Fond 529, opis 44, No. 1263. 1910, p.69.
9. Otchety Krest'yanskogo Pozemel'nogo Banka. Obzor Deyatel'nosti Banka za 1907, St. Petersburg, 1909, p.19.
10. Uchastkovaya Agronomicheskaya Organizatsiya Samarskogo Uyezdnogo Zemstva za 1910, Samara, 1912.
11. The 21 separate parcels consisted of: in the village, the farmyard; in each of the eight arable fields in the primary allotment, eight parcels (each half desyatina in size); 7 versts from the village in the secondary allotment, eight parcels; 9 versts from the village one plot of woodland associated with the primary allotment; at another 9 versts from the village another plot of wood

associated with the secondary allotment; 40 versts from the village, one plot of hayland associated with the primary allotment; and 15 versts from the village another plot of hayland, associated with the secondary allotment.

12. Sbornik Statisticheskikh Svedeniy po Samarskoy Gubernii; Samarskiy Uyezd, Moscow, 1883, p.89.
13. Slobodchikov, op.cit., p.59.
14. Ibid., p.61.
15. Ibid., p.61.
16. Ibid., p.15.

CHAPTER IV

THE VARIATION IN THE ADOPTION OF ENCLOSURE - ANALYSIS AND EXPLANATION

In numerical terms, the Stolypin Land Reform achieved some success in each of the three sample Provinces. In Tver and Tula, however, where the need for reform was probably most urgent, the enclosure movement developed comparatively slowly while in Samara, where the problems of peasant farming were considerably less acute, the record of the movement was relatively impressive. The situations in the sample Provinces were, it would appear, fairly typical: writing in 1964 Mosse noted that, "by a curious paradox it (the Reform) appeared most relevant and practicable in precisely those parts of the Empire where it was perhaps least needed " (1). Clearly there were forces operating in the Russian countryside that retarded the development of the enclosure movement and these forces were strongest in those provinces in which reform was most necessary.

Hitherto no detailed investigation has been made of the reasons for the wide regional variation in the pattern of adoption of enclosure. A number of authors, however, have put forward suggestions as to some of the probable causes. Mozzhukhin, for example, maintained that, "its (the Reform's) success appears to be due to the influence of very different factors; for example the extent to which a village's land is intermixed with that of neighbouring landowners, the relief of an area, differences in the type of soil, the availability of water, the level of economic development of a locality and the presence or absence of model enclosed farms in the neighbourhood" (2). To Mozzhukhin's list the author has been able to add other factors, namely: the size of the peasants' land holding in a given province, the extent to which the peasants were involved in non-agricultural work, the social life of the peasants and how far it revolved around the commune and the legal status of the commune. The relative importance of these factors in determining the course of the enclosure movement in the three Provinces can be analysed.

It is assumed that the majority of peasant farmers in European Russia felt the need for agrarian reform of some sort by the beginning of the twentieth century: attention is thus focused on those factors which retarded or prevented the adoption of enclosure. The question at stake is why in some provinces so many peasants resisted or were unable to adopt the type of reform suggested by the Government.

IV - 1. The Legal Status of the Commune

One of the major problems that confronted provincial Land Settlement Committees was of the legislators own creation and related to the legal status of the communal assembly. The Emancipation Act of 1861 had introduced a new political and economic institution into the Russian countryside - the rural society (sel'skoye obshchestvo), which, run by an assembly of all its members, had ultimate control over the activities of the peasants. Officially, rural societies consisted of all peasants who shared the use of land or who had "other economic interests in common" but, in effect, the definition was so vague that it allowed landowners in 1861 to constitute rural societies out of entirely independent groups of peasants. The attraction of such legislation for the landowners was considerable for it meant that they could simply deal with all their emancipated serfs as a single body instead of having to reconcile the problems of distributing land between the different settlements on their estates. Therefore, in the interest of convenience, the law created new agglomerations of previously separate communities. Meanwhile the commune, which had been in existence for decades and which was the true outward expression of the way in which different peasant households were inter-related, was given no legal recognition at all and its functions were transferred to the newly constituted rural society.

Rural societies sometimes coincided in area with communes but usually they did not. In the densely settled central Russian provinces rural societies consisting of a number of communes were very common. In Tver there existed rural societies made up of sixteen communes and only rarely did they consist of fewer than five. Similarly, in Tula non-coincidence was the rule. Peasant land in both these provinces was so intermixed and such a large proportion of it held in common that to allot it in 1861 to individual communes would have involved the landowners

in too complicated a task. In Samara, where the settlement pattern was one of large dispersed villages, the formation of rural societies coinciding with communes was, in contrast, more common.

During the years between 1861 and 1906, the artificiality of the situation became apparent for in most cases where there was a non-coincidence between commune and rural society the separate identity of the former was in practice preserved: communal assemblies continued to exercise their authority and distribute their land separately. Gradually, the law began to recognise the commune. In 1896 it was ruled that every settlement "that has in fact separate plough lands should be regarded as, in respect of land holdings, an independent group" and in 1899 a law was passed recognising for fiscal purposes the separate identity of the smaller groups and their assemblies (3). The commune, in economic terms, thus remained the main rural institution for the peasants.

The Enclosure Legislation ignored these rulings and the decree of 1906 was drawn up solely in terms of the official rural societies. The Government was therefore depending on the rural societies to make decisions about questions which in many cases had in reality never been in their control; the result was not always to the advantage of the enclosure movement. Where communal enclosure was concerned, for example, one commune could decide unanimously to enclose its land but could be outvoted by peasants from the other communes in the rural society. As a result of this in 1911 the Government reconstituted the laws of enclosure to recognise the authority of the assemblies of separate communes in a rural society. Meanwhile, however, the confusion surrounding the provisions of the 1906 legislation prevented the enclosure movement from 'taking off' in some areas. The possibility that this contributed to the weak response to the Stolypin legislation cannot be discounted.

Once it was acknowledged that the communal assembly was legally responsible for decisions relating to the reorganisation of peasant land holdings, the enclosure of whole communes depended solely on the wishes of its members. This did not necessarily mean, however, that the enclosure of the land of the whole village communities was simplified because communes did not everywhere coincide with villages. Although the majority of communes were 'simple' (prostaya obshchina) embracing a single village, others covered only part of a village (razdelnaya obshchina) - divisional commune. The latter were widespread

in the areas where villages were too large to be run by just one assembly. The implications for enclosure were considerable for if the land of a whole village was to be enclosed, the agreement of two or three separate communes was required, each having to return a two thirds vote in favour - this in practice was often difficult to obtain.

In Tula, where divisional communes constituted 20.7% of the total, the situation was unsatisfactory both before and after 1911. Because of the relatively dense settlement pattern of the Province, it was not unusual for landowners to include villages consisting of several communes in one rural society along with their neighbours. This meant that, as the law stood immediately after 1906, the ability of such villages to enclose depended on the agreement of their co-members in the rural society. But when the law was changed in 1911, the situation was equally difficult because enclosure of whole villages in nearly one in four cases depended upon the agreement of two or more communes. This could partly explain why the enclosure of land by whole village communities in Tula was so weakly developed when compared with either Tver or Samara. In Tver, the number of simple communes was far greater than in Tula (only 12% were divisional) so that after 1911, enclosure of a whole village's land was a relatively simple process. The situation was similar in Samara.

IV - 2. The Spatial Organisation and Use of Communally Owned Land

A more important influence on enclosure than the legal ties which bound individual villages and communes together was the way in which land was distributed and used. "In some provinces", a G.U.Z.i.Z. investigation reported, "there is a delay in the transfer of peasants from communal to individualised farming due to the existence of single-planned villages (4), jointly owned woodlands and the interspersion of land of private landowners with the peasants' allotment land" (5). Where the spatial organisation of the land was particularly complex, enclosure was necessarily a two-stage process: first, land had to be redistributed so that it formed a single self-contained unit around each commune and only, secondly, could it then be sub-divided into consolidated parcels for the individual households. The need to unravel the land of several different landowners sometimes prevented enclosure

altogether because it proved to be impossible to reconcile the interests of all the parties involved. Even Kofod, who was one of the most ardent proponents of the Stolypin Reform, was forced to concede that there were cases where the existing organisation of the land was so complex that "it is not always possible" to carry out the Reform (6). Of the provinces under investigation, the spatial organisation of village land was most complex in Tver and Tula and there is evidence to suggest that this complexity was an important factor in retarding the development of the enclosure movement in both.

The division of land held in common between two or more villages presented the Tver and Tula Land Settlement Committees with a number of serious problems. It was found that wherever the villages sharing the use of a parcel of common land were of different sizes (as was usually the case), the smaller very often resisted redistribution: while it remained in communal ownership small villages could, under certain circumstances, use more than their due share of land (7). Also if the quality of the common land varied, its equitable division was difficult and controversial. Reports of resistance to the redistribution of common land are numerous. In Novotorzhskiy uyezd (Tver), for example, the villages of Khvoshin and Selitse held their woodland in common: in 1911, when Khvoshin decided to enclose "a serious dispute arose between the two villages concerning the use of the woodland"; Selitse village complained that Khvoshin had illegally appropriated part of the woodland to form otrubs and insisted that it should be returned into the communal use of both villages. Although the complaint was not upheld by the Land Settlement Committee, the problem took over two years to resolve before enclosure in Khvoshin could proceed (8).

More difficult to resolve than the above were the problems that arose in Tver and Tula in the attempt to redistribute the land of communes that was spatially intermixed with that of other landowners. In Tula Province, the Land Settlement Committee in each of its projects had, on average, to reorganise the land of no less than three villages, four large landowners and twenty seven small landowners; it is not surprising that work proceeded slowly and in some cases was halted altogether.

In general, most communes were anxious for their land to be consolidated and there is evidence that even before the introduction of the 1906 legislation many in both Tver and Tula petitioned the Ministry of Internal Affairs with requests to be allowed to exchange land parcels. For example, in 1896 the villages of Kholma and Desna in Tver asked for permission to effect an exchange of land: part of the allotment of Kholma lay 7 versts from its settlement and adjacent to Desna, while some of the land of Desna village lay only a half verst from Kholma - the exchange was permitted, but Kholma village had to pay 33 rubles per desyatina to Desna as compensation for the inferior quality of its land (9). Although the question of land quality after 1906 proved to be the principal obstacle in the redistribution of land between communes, the Land Settlement Committee, with the strength of the law behind it, was able to resolve most of the conflicts that arose.

When, as was so often the case in Tula and Tver, the peasants' land was intermixed not only with that of other peasant communes but also with that of private landowners, the task of the Land Settlement Committee was considerably more difficult. This was because the law as it stood in 1906 applied only to the redistribution of peasant allotment land. Thus, until the law was amended in 1911, there were no legal means whereby private landowners could be forced to co-operation in Group Land Settlement projects. A single stubborn landowner could therefore prevent the consolidation of a commune and to do this often proved to be materially to his advantage.

The newly formed class of peasant landowner who redeemed his fields in the commune also caused problems for the Land Settlement Committees. On becoming private landowners for the first time, the peasants invested what little capital they had into the land improvement and, understandably, were reluctant to see the fruits of their labour pass to another peasant. Reports such as the following are common in the yearbooks of the Land Settlement Committee: in Khvoshin village, Tver, one peasant requested that, "the Land Settlement Committee exclude from its projected enclosure of the village his land to which he had taken title in 1906" (10); in one commune in Bezhetskiy uyezd "the peasants took their land parcels into individual ownership and it turned out that each of them had thirty or more in the three fields of the village. Some of them want to consolidate their parcels but others do not want to " (11).

Similar problems existed in the attempt to redistribute land purchased by the peasants which was intermixed with communal land. Where such land was concerned, however, the normal run of problems was further complicated by the fact that debts usually still existed on purchased land, for few peasants could afford to buy outright without a substantial loan. Even if a peasant was prepared to surrender his purchased land for enclosure, it was often difficult to decide whether the debt should be transferred to the peasant receiving the land or whether the original purchaser should continue to repay money for the purchase of land that he no longer held. Neither solution was satisfactory and the presence of purchased land in a village could prevent complete consolidation. It is interesting in this context that Prudy village, Tula, peasants purchased land from the Peasant Land Bank in 1907; when it was decided to enclose, the Land Settlement Committee had to form otrubs on both the purchased and allotment land and every household received one of each.

Even if the redistribution of land between communes and separate landowners had not in itself given rise to serious problems, the prior necessity of redistribution would have served to slow down the enclosure movement in both Tula and Tver Provinces. As it was, the process of Group Land Settlement went anything but smoothly in the two Provinces and an already difficult situation was exacerbated by the absence in the 1906 legislation of any provisions covering the redistribution of non-allotment land. In the light of experience, amendments were made to the enclosure legislation: in 1910 it was laid down that no peasant could redeem his land without it being simultaneously consolidated, and in May 1911 all land, and not just peasant allotment land, was made subject to compulsory redistribution. Certainly, these amendments helped to accelerate the process of Group Land Settlement - and hence of enclosure in Tula and Tver - but by then much valuable time had already been lost in needless and unproductive wrangling between different landowning classes.

Whereas in the years following the passing of the 1906 legislation the Land Settlement Committees in Tula and Tver Provinces had to concern themselves primarily with Group Land Settlement, in Samara the local committee could proceed immediately with the task of reorganising the peasants' land into khutors and otrubs.

The principal complicating factor in Samara was the presence of large tracts of crown and appanage land much of which, according to the Witte Commission, was intermixed with that of the peasant communes.

In effect, this proved to be less of a problem than might at first be assumed because, in the interests of furthering its own policy, the crown after 1906 was very willing to redistribute and exchange land with peasant communes. This can be illustrated by the example of Novo-Domoseykina village, Bugulminskiy uyezd. Figure 31 shows that before Land Settlement the village's land was divided between the allotment and some that had been purchased from the Peasant Land Bank. The area between the two was crown land which was rented by the peasants in the village to enable them to have access to the northern purchased parcels. "The inconvenience of the distribution of the land", it was explained, "prompted the peasants to request that the crown land be exchanged for an equivalent area of their allotment land, situated at the furthest point from their purchased parcel. The aim was to enable the peasants to transfer their settlement on to the new land and at the same time divide it into a series of otrubs" (12). The authorities readily agreed and the former crown land was divided into sixty seven otrubs; furthermore, it was decided to allot a section of the land that had now been transferred into the ownership of the crown into sixteen additional otrubs for the landless peasants in Novo-Domoseykina. Such co-operation often characterised situations where the land of the crown was inter-mixed with that of peasants.

IV - 3. Ecological Conditions in the Commune

The quality of land in most communes of European Russia was varied; not surprisingly the peasants often could not reach an agreement amongst themselves on how exactly it should be redistributed. It was not possible simply to allot to each household in one place the same amount of land that it previously had held in a series of parcels - in other words to make a purely quantitative redistribution; adjustments had instead to be made to take into account difference in the fertility of the soil, aspect, drainage, slope and a whole host of other factors. As a result, enclosure on this score also turned out to be a complicated and often very controversial process.

Various methods of enclosing the land so that no household had an unfair advantage over its neighbours were devised by the Land Settlement Committee for peasants in different communes of European Russia. In Grachevka village, Samara (Figures 19 and 20), as a preliminary to redistribution, the Land Settlement Committee surveyor

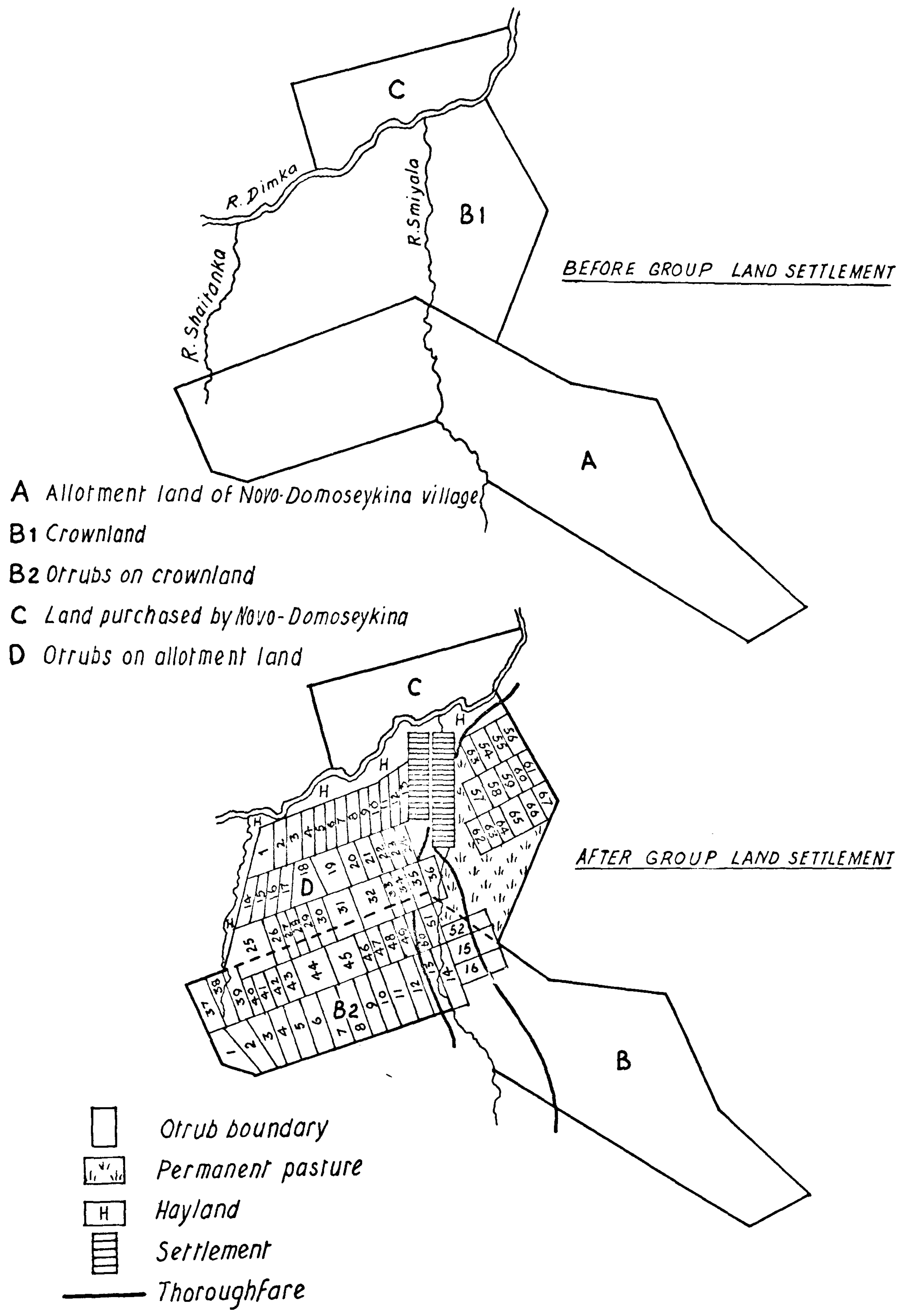


Fig.31-Plan of Novo-Domoseykina village before & after group land settlement

and representatives of the communal assembly made a joint survey of all the land in the village in order to determine its quality in different places. As a result of this survey, it was possible to classify the land into four broad groups of declining quality, A-D, and it was decided that the size of one allotment should be different in each category: one allotment of group B land was to be 5% larger than one of group A, one of group C 15% larger and one of group D 35% larger. Thus the poorer the quality of the land the greater the quantity allocated. The formation of khutors took place with the households drawing lots and, starting from the most northerly point of the village on the river Yumratka, allocations were then made of the number of allotments to which there was entitlement based on the number of revision souls in the family (13).

In other communes, particularly in those in the central provinces, an alternative, and probably less equitable, system of enclosure was practised whereby the land was distributed among the peasants 'by auction'. Under this system, the peasants and Land Settlement Committee surveyor would, as in Grachevka, first make a survey of the village's land and divide it into a series of groups according to quality. Then, starting with the best, each group would be put up for auction to the peasants. Trade usually took place in one of two ways: either the peasants could put down money pledges for the land they wanted or, alternatively, and this was the most common method, they could offer to accept less land than was in reality due to them (14). In both cases the land went to the highest bidders - to those households which offered most money for the land or to those which were prepared to accept the greatest reductions in the size of their allotment. Having apportioned the best land in the village in this way, the same method was used to distribute the next best land and so on. This continued until the point was reached when the peasants ceased to consider it worthwhile making bids for the land as only that of below average quality remained to be distributed. At this stage, all the land left over was divided equally between the remaining households according to the number of their revision souls. In those communes in which the trading medium had been pledges, the households received compensation in the form of money for being allotted poor quality land, the sum collected from the auctioning of the better land being divided between them, whilst in those in which the trading medium had been land,

they were compensated, as in Grachevka, by receiving more land relative to the number of revision souls in the household than their neighbours.

Other systems of enclosure, some more and some less complicated, were used by communes in European Russia. All however had one feature in common: they were all designed to provide some sort of compensation for those households which were allotted poor quality land and, as a corollary, to penalise those which were allotted the best land. It was hoped that in this way any accusation of unfair redistribution would be avoided and enclosure would, as a result, proceed smoothly with the support of all the peasants. These expectations were rarely fulfilled and enclosure in many communes was accompanied by conflicts which were sometimes so severe that the project had to be abandoned. The Samara Land Settlement Committee reported in 1910 that, "the controversies that so often arise in the business of enclosing a commune's land derive mainly from the fact that every household wants to receive the best land and those households which are allotted land of poor quality are often discontented even though they get more land than they had before" (15).

The peasants' discontent was in most cases justifiable for often a considerable amount of energy and capital had to be expended on the land before it was any real use for farming. In Tver, for example it was not uncommon for some peasants to be allotted their otrubs on marshy and stony scrubland which in the commune had been abandoned. This land had to be drained or cleared before it could be brought into productive use, but many peasant households had neither the labour nor the money required to do this. The Tver Land Settlement Committee was literally inundated with requests from the peasants for land improvement grants after enclosure, reports such as the following in its 'Monthly Journal' being very common: "Peasant ----- in Topalkovskiy uyezd requests that he be granted 300 rubles credit to drain his land. The village was enclosed in 1911 and the peasant in question received 14 desyatinas of land but of this only $4\frac{1}{2}$ desyatinas are in a state suitable for cultivation. The rest is too wet" (16). And again: "Peasant ----- in Tverskiy uyezd requests that he be given a loan of 200 rubles in order to buy the tools necessary to plough up his land. His khutor is 11 desyatinas 1,036 sazhen in size. Already the applicant has been given 150 rubles credit to move his buildings on to the land (in 1910) but since then he has had to work as a labourer on a neighbour's khutor. The problem is that Peasant -----'s land consists

only of scrub and hayland - he was not allowed any arable. Only in 1913 was he able to work half a desyatina" (17). Merely to allot to the peasants more land than their neighbours or indeed to give them a lump sum of money was little compensation for all the disadvantages and hardships associated with receiving an otrub or khutor on the poorest land of a village.

With the example such as those described above before them, peasants in many communes of European Russia opposed enclosure, fearing that they too would be allotted poor quality, infertile farms. This opposition, for obvious reasons, was strongest in those provinces in which the quality of land was most varied and weakest in those in which the quality of land was relatively uniform. It is not perhaps surprising, therefore, that, as the Land Settlement Committee observed in a report of 1914, "the enclosure movement is developing most rapidly in the flat provinces where the constitution of the soil is most homogenous" (18).

Of the three Provinces, the quality of land was most varied in Tver. Tver had extensive tracts of unproductive, infertile marsh and scrubland and a wide variety of soil types and varied relief. As a result, it was particularly difficult to effect an equable redistribution of land into khutors and otrubs, a problem recognised by many contemporary observers. "The complete elimination of fragmentation", the Tver Witte Commission reported, "is impossible because of the differences in the fertility of the soil and of drainage it is possible only to reduce the number of fields to five to eight per household" (19), and further, "the formation of khutors in most uyezds in Tver is not feasible because of the differences in soil conditions - it would result in the impoverishment of a large number of households" (20).

Physical conditions in Samara Province were entirely different from those in Tver. In Samara, one of the Land Settlement Committee's 'flat' provinces, the fertility of the soil was more uniform than in Tver and variations in the slope and aspect of the land considerably less marked. As a result, it was easier for peasant households in communes to decide among themselves how their land should be redistributed. "The steppe and semi-steppe character of the area and the close relationship between relief and the quality of the soil", the chief zemstvo agronomist explained, "creates very favourable conditions for the qualitative redistribution of land between peasant households" (21).

True, some peasants in Samara did object to enclosure on the grounds that they might be allotted land of inferior quality but, compared with Tver, they were not numerous and rarely were they powerful enough actually to prevent its adoption.

Although the enclosure movement developed with considerable rapidity in many provinces in the steppe and semi-steppe zone of European Russia, most of the enclosed farms formed here were not, as the Land Settlement Committee would have preferred, khutors, but were the "much inferior" otrubs. The explanation for this would, as noted in Chapter III, appear to lie first and foremost in the aridity of the steppes. Wherever annual precipitation levels were low and reliable and abundant sources of water were scarce, the formation of khutors, however desirable in theory, proved in practice to be prohibitively expensive because on each new holding a well had to be sunk or irrigation ditches dug. Such was the case in Samara Province and so, too, in the more southerly uyezds in Tula. In Grachevka, one of the few villages in Samara that was enclosed into khutors, wells had to be sunk on one hundred and nine of the hundred and twenty nine new farm units formed for which the Land Settlement Committee had to extend credit of the order of 50 - 150 rubles to each household. Because of the expense involved in khutor formation, otrubs came to be the dominant type of enclosed farm formed in all the arid provinces - this, according to the Samara Land Settlement Committee, ".... saved a colossal amount of money that would otherwise have been required in hydrotechnical work" (22). In the provinces situated in the mixed forest zone, where in contrast to the steppe precipitation levels were high and there were abundant streams and rivulets, khutors were relatively numerous.

IV - 4. The Economic Wellbeing of the Peasant Class

Even without the delays arising from the need to reorganise village lands, the confusion surrounding the legal status of the communal assembly and the difficulty involved in redistributing land of different quality, enclosure for many peasants proved to be impossible simply for financial reasons. Enclosure of the land and the subsequent organisation of farming on a new unit was an expensive process: fences, the materials for which the peasants had to supply themselves, had to be constructed around each new land unit, often the land had to be improved by drainage and irrigation and, if previously unworked, had to

be ploughed up before being brought into productive use, wells had to be dug, and, where khutors formation was concerned, the peasants' dwellings and outbuildings had to be moved, often several versts, to a new location. In addition, the peasants whose land was being enclosed had to provide free accommodation for the Land Settlement Committee's surveyor plus all the materials, such as boundary markers, that he would require.

There was provision under Acts passed in March 1907 and June 1912 for the Land Settlement Committee to give material assistance to peasants, in the form of monetary loans and interest free grants, for the movement of buildings, land improvement and even for the purchase of basic farm equipment and livestock. But as Dubrovskiy pointed out, "in practice the loans were too small to cover the actual expenditure that the peasants incurred in the transition to the new forms of land tenure and organisation" (23). According to the 1913 G.U.Z.i.Z. investigation of enclosed farms in European Russia, the average cost of moving buildings was 236 rubles, but the loans made to peasant households by the Land Settlement Committee rarely exceeded 150 rubles: thus they generally met only 44% of the cost simply of the removal of buildings, to say nothing of the other costs. Moreover, by 1st January 1915 only 299,699 of all enclosed farms in European Russia had received such loans, approximately 16% of the total, while a mere 58,000, 4% had been given grants.

It is clear from an examination of the returns of the 1913 investigation, that both the cost of enclosure and the number and value of loans and grants given out by the Land Settlement Committee varied regionally. Where the three Provinces under investigation are concerned the difference, as shown in Tables 44 and 45 overleaf were very marked. Enclosure was more expensive for peasants in Yeipfanskiy and Rzhevskiy uyezds in the centre of European Russia than in Nikolayevskiy on the periphery - the number of households having to bear the cost of moving buildings and of undertaking some form of land improvement work was considerably higher in the former than in the latter, although the expenditure per household was lower. Commensurate with this, the percentage number of households that received loans from the Land Settlement Committee was greater. In all three uyezds, however, the loans allocated to the peasants, whether to the smallest minority of the total

Table 44

Expenditure Incurred and Loans Granted to Peasants in the
Formation of Khutors and Otrubs on Land of the Peasant Land
Bank in Nikolayevskiy and Yepifanskiy Uyezds (3)

	Yepifanskiy		Nikolayevskiy	
	khutors		khutors	
	and		and	
	otrub-		otrub-	
	hamlets	otrubs	hamlets	otrubs
1. Cost of moving buildings (in <u>rubles</u>)	263.4	-	116.4	-
2. % farms on which P.L.B. did improvement work prior to sale	20.1	4.7	38.6	12.1
Av. value work done (in <u>rubles</u>)	4.9	15.6	22.0	12.7
% farms on which new peasant owner had to do improvement work	53.8	53.6	4.8	10.4
Av. value work done (in <u>rubles</u>)	79.2	25.8	11.1	26.8
3. % farms granted loans by G.U.Z.i.Z.	86.5	2.7	63.2	4.2
Value of loan (in <u>rubles</u>)	138.8		73.7	
% farms given grant by G.U.Z.i.Z.	0.2	-	3.3	-
Value of grant (in <u>rubles</u>)	80.0	-	85.8	-

Table 45

Expenditure Incurred and Loans Granted to Peasants in the
Formation of Khutors and Otrubs on Allotment Land in
Nikolayevskiy and Rzhevskiy Uyezds (3)

	Nikolayevskiy	Rzhevskiy
1. Cost of moving buildings on to <u>khutors</u> (in <u>rubles</u>)	238.4	330.7
Cost of rebuilding on <u>otrubs</u> (in <u>rubles</u>)	40.7	99.6
2. % number farms on which land improvement work done	22.0	72.8
Ave. cost of work (in <u>rubles</u>)	140.0	65.6
Ave. cost of work on <u>khutors</u> alone (in <u>rubles</u>)	221.1	85.5
3. % number <u>khutors</u> granted loan by G.U.Z.i.Z.	1.4	81.8
Ave. value of loan (in <u>rubles</u>)	100.0	136.5
% number <u>otrubs</u> granted loan by G.U.Z.i.Z.	0.2	14.9
Ave. value of loan (in <u>rubles</u>)	75.0	100.7

as in Nikolayevskiy or to the majority as in Rzhevskiy, went only a fraction of the way towards covering the cost of enclosure.

Given that few of the peasant households that consolidated their allotment land or purchased khutors or otrubs from the Peasant Land Bank could expect any more than a notional amount of material assistance from the Land Settlement Committee, it is not surprising that enclosure won the support mainly of the more prosperous households, namely those which within the commune had been able to accumulate more than the average amount of land or capital. For the poor and land-short peasant households, enclosure was simply not a practicable proposition. "Land shortage and poverty", Chernishev argued, "prevent the adoption of the otrub system even by those peasants who very well understand its advantages" (24). The poor peasant households were themselves fully aware that enclosure would merely result in an immediate worsening of their already unsatisfactory financial position and, in order to avoid total impoverishment, they resisted enclosure wherever possible.

Apart from the question of its prohibitive cost, there were other reasons why enclosure was strongly resisted by the poorest class of peasants in the countryside. Because of the existence of communal pastureland the practice of communal stubble and fallow grazing, even those households with the smallest land holdings were able, so long as they remained in the commune, to maintain the livestock required to work their land to meet their basic subsistence requirements. With enclosure, however, the situation changed, for now all households were forced to support their livestock from their own land resource base and this often proved difficult. Indeed, in many parts of European Russia, enclosure was accompanied by an immediate drop in livestock numbers on farms of all sizes. While some reduction could be tolerated on large farms, for small land holders it often meant the loss of the single horse or cow that was essential for the farms' very existence. This being the case, it is not surprising that many peasants with small land holdings felt threatened by enclosure or, if it did take place, insisted that the communal pastureland be retained; in this latter plea, they were more often than not supported by their land abundant neighbours, many of whom grazed a disproportionately large number of livestock on the common lands.

On top of their fears about the loss of common grazing land, many poor peasant households were afraid that enclosure would destroy the tradition of mutual co-operation, a common feature of farming in the commune which was obviously to their advantage. Although the working of the land was the independent concern of each household in the commune, nevertheless it was the widespread practice for peasants to pool their resources of working livestock, farm implements and machinery, and even labour, during the busiest periods of the year. Enclosure would not necessarily put an end to this practice, but it was inevitable that with the dissolution of the village commune, the physical dispersal of settlements such as was involved in khutor formation and the introduction of a new philosophy into farming based on individual endeavour and 'the survival of the fittest' the tradition of mutual co-operation would certainly weaken. Understandably, it would be the poorest households, those with too few working livestock and little farming equipment which were dependent for their survival on their neighbours' help, that would suffer most. Few poor peasants had the capital necessary to equip and stock fully their farms - a problem of which none was ignorant.

Thus, although by no means confined to one single socio-economic class in the countryside, opposition to enclosure was, for the reasons outlined above, probably strongest among the poor landshort peasant households. Certainly this would seem to have been the case in Tver, Tula and Samara Provinces and reports such as the following being fairly common in the records of the provincial zemstvos and Land Settlement Committees: "In our village (Tverskiy uyezd) a number of peasants have expressed the desire to move on to khutors but there are various obstacles to their doing so. The greatest of these obstacles is land shortage - the peasants with small land allotments will simply not agree to enclose" (25); "In Bezhetskiy uyezd many villages have not been enclosed because here there are many households with only a single land allotment, they have in all no more than 3 desyatinas of land, and on 3 desyatinas they say it is impossible to survive alone whilst in the commune it is possible to eke out an existence" (26). "In the communal assembly (of Malaya Kamenka Village, Samara) consisting of one hundred and sixty five households, the rich peasants put forward a motion to divide the commune's land into khutors and otrubs for the rich peasants such a redistribution is of course advantageous. The rest of the peasants, who are for the most part poor and number one hundred and eight in all, did not want otrubs and so would not vote in favour of enclosure" (27).

Despite their obviously strong and, it can be argued, justifiable opposition, the poor peasant households were able to prevent the enclosure of their land only in those communes in which they were sufficiently numerous to outvote their more prosperous neighbours on the communal assembly. In communes in which they were in the minority, the poor peasants, however strongly they might argue against it, had no alternative but to enclose if their co-villages once decided on its desirability. This being the case, it can be concluded that the regional variation observed in the success of the enclosure movement reflected to a large extent the regional variation that existed in the number of peasant households included in the ranks of the poor. It is surely no coincidence that in Tula and Tver Provinces and in the northern uyezds of Samara, where the majority of peasants in most communes had too little land on which to subsist, owned too few live-stock and only the most primitive farm implements, the enclosure movement failed to make any appreciable headway. In comparison, in the southern uyezds of Samara, where peasant land holdings in the commune were amongst the largest in European Russia and the majority of peasant households, compared with their counterparts elsewhere, were relatively prosperous, the movement developed with considerable rapidity.

That the general economic wellbeing of the peasant masses in any given region was an important factor governing the spread of enclosure was recognised by many contemporary observers. In Tula Province, for example, an investigatory commission of the Land Settlement Committee reluctantly came to the conclusion that, "it is necessary to wait until the balance between the rural population and the land available in the Province has regulated itself and freed the countryside of those elements completely unsuited for farming for the enclosure movement to develop" (28). As the 'elements completely unsuited for farming' or, in other words, the mass of landshort, impoverished peasant households, outnumbered by several times the other 'elements' and moreover were reluctant to abandon their land, it can only be concluded that the 'waiting period' in Tula would have been a long one, considerably longer than the twenty years estimated by Stolypin as necessary for enclosure to transform the countryside. The same can be said of many other areas of European Russia, the majority of uyezds in Tver and the northern uyezds of Samara included.

IV - 5. Involvement in Off-Farm Employment

The involvement of large numbers of peasant households in off-farm employment, such as was characteristic in Tver and Tula Provinces, was another factor which contributed to the weak response to the Enclosure Legislation in some parts of European Russia. A number of suggestions can be put forward as to why this was the case. It is evident from reading contemporary reports that many of the peasant households involved in off-farm employment simply were not interested in any type of agrarian reform. The reason for this is not hard to find - so long as income was forthcoming from other sources, whether from work in industry or in agricultural wage labour, there was no need to make a profit from farming and to raise productivity or to use the land to satisfy any more than basic subsistence requirements. There is ample evidence that this was the case for many peasant households in Tver and Tula: as early as 1885, to quote but one example, it was observed that, "..... in Opoka village (Tver) because the inhabitants do not consider agriculture to be their principal means of subsistence they make no attempt to improve their land or to extend the area of their landownership" (29). Later in 1911 the Land Settlement Committee reported that, "in the provinces where there is industry where the peasants work in factories and in domestic industry, the people are just not interested in the land and hence are not interested in the Government's methods of improving it through enclosure" (30). In provinces where there was little opportunity for finding work outside farming, the peasants in contrast had no alternative but to 'take an interest' in their land if they wanted to survive and prosper. Perhaps this is one reason why in the purely agricultural provinces such as Samara, the peasants were more inclined to adopt enclosure.

The employment of most able-bodied men away from the farm naturally led to labour shortages in these households and this contributed to their weak response to enclosure. In Tver especially, it was not uncommon to find whole communes in which farming was undertaken almost exclusively by the womenfolk, the very old and young. To enclose the land of such communes was simply not possible - enclosure was not only a capital but also a time and energy consuming process. In other words, enclosure required the labour of precisely those peasants who in many communes of Tver and Tula were absent from their farms for most of the year.

Peasant households which engaged in domestic industrial production instead of sending their members away to work formed a group which not only showed little interest in the Government's land reform measures but actively opposed them, arguing forcibly for a retention of the communal organisation. Again, it is not necessary to look far for the reasons: in the commune conditions were favourable both for the purchase or distribution of industrial raw materials and for the organisation of the local industrial labour force. With enclosure, and more particularly the formation of khutors, these conditions would be destroyed - the peasants would have to travel to the urban centres to acquire their raw materials and to dispose of their finished products instead of doing this as previously in their village and, probably more important, the local labour force would be dispersed, resulting in inconvenience for employers and employees alike. The fear, expressed by peasant households throughout European Russia, that during the long winter months they would be cut off and isolated from their neighbours if they moved on to khutors was particularly strong among those who were engaged in domestic industrial production.

It is evident from the above that, although they might not always have had grounds for actively opposing it, those peasant households which were in some way involved in off-farm employment could not be expected to lend the enclosure movement any positive support. It is not surprising, therefore, that wherever such households were numerous and dominated in the majority of communes, as was the case in Tver and Tula, the enclosure reforms were, at best, unenthusiastically received.

IV - 6. Peasant Opposition to Enclosure

Whatever the practical reason, the opposition to enclosure among certain sections of the peasantry in communes throughout European Russia was basically derived from the peasants' fear of some of its consequences or, as Kofod preferred to put it, from the peasants' 'vested interests' in the commune. As has already been shown, many peasants were afraid that on enclosure they would be allotted poor unproductive land by the Land Settlement Committees; others, namely the poor and landshort, that they would be forced to liquidate their holdings, and yet others, the class of 'peasant industrial workers',

that they would be unable to continue their domestic industrial production on which they depended for much of their income.

There were, in addition, other reasons, not all of them well founded, why the peasants opposed, sometimes passively but often actively, the enclosure of their land. First, there was a widespread belief among many that it would be more difficult, and certainly more expensive, to maintain livestock on an enclosed farm than in the commune. "The rural population", the zemstvo in Samara explained, "is opposed to the introduction of otrubs and khutors in view of the fact that it would deprive them of communal grazing land for their livestock" (31). Such was echoed by many investigators in other provinces; the Witte Commission observed that in Tver, "peasant households redeeming their allotment land do not generally consolidate it into one place but keep it in the strips in the commune in order to retain their rights in the communal pastureland" (32), while Mozzhukhin found that the "difficulty of providing pasture for livestock on enclosed farms" was one of the "principal objections" that the peasants in Bogoroditskiy uyezd, Tula, levied against enclosure (33). Secondly, some peasants feared that if their land was consolidated into one place the advent of freak localised weather conditions, such as an intense hail storm, or of fire, could destroy their whole crop for one year. When land was distributed in a number of different places as in the commune, so the argument went, there was a good chance that some of the crop would not suffer. Thirdly, it was argued that the new thoroughfares that would have to be laid out to each farm unit would take up much land that otherwise could be used for crop production - in some parts of Russia the peasants needed every bit of available land.

Other objections were levied specifically at the formation of khutors. Many of the objections were purely on social grounds, the peasants maintaining that, isolated on their khutors, they would be unable to attend Church regularly, or to send their children to school. For example, one peasant in Samara Province was adamant, "at the present time there is absolutely no point in talking about it (i.e. enclosure) because on a khutor it would be impossible to educate our children, the church would be too far away and we would most probably freeze in winter" (34). Another explained that, "the local population is opposed to khutors and otrubs because they lead to alienation and lowering of cultural standards" (35). Understandably opposition to moving on to

khutors was particularly strong among the womenfolk who feared that they would be prevented from having any social intercourse with their neighbours: "Here we do everything gaily", one peasant woman explained, "there it will not be large strips but a grave" (36). In addition to these social factors, many peasants resisted moving on to khutors on the grounds that, isolated from their neighbours, they stood in danger of being robbed: in a village, they argued, help was always within easy reach. It is unlikely that arguments such as those briefly described above were on their own sufficient to sway the opinion of peasants in the commune against enclosure. Nevertheless, they did add force to the more serious objections voiced by the anti-enclosure lobby and in some communes consequently contributed to the decision not to enclose.

IV - 7. The Obstacles to Individual Enclosure

The limited numerical success of the enclosure movement testifies to the fact that the dominant peasant sentiment in European Russia was against enclosure. Nevertheless, some peasants did feel that the advantages of hereditary ownership and land consolidation outweighed all the disadvantages. In some communes, these peasants were sufficiently numerous to influence the vote on the communal assembly in favour of enclosure. In others, however, they were in the minority and the suggestion on their part to enclose their commune's land was rejected by their neighbours. Wherever the latter was the case, the only course of action open to the peasant wanting to enclose his land was to withdraw unilaterally from the commune.

The evidence available to the author suggests that the majority of peasants in the communes of European Russia were just as opposed to the enclosure of their neighbours' land as they were to the enclosure of their own, for often the separation of individual households and small minority groups from the commune took place in the face of opposition and without the consent of the village meeting. V.V. Yakunin, Governor of Samara Province, explained why this was the case: "The interests of the non-separators almost always are in conflict with those of the peasants wanting to consolidate their land the voluntary, and amicable agreement between them on all questions relating to enclosure, especially that concerning the choice of the location of otrubs, is rarely achieved" (37). The individual separators for obvious reasons usually asked for their consolidated farm unit to be formed on the best

land of the village, and in the case of otrub formation, on the most accessible. The peasants remaining in the commune were rarely prepared to grant these requests - they were reluctant to surrender some of their best land or to see the emergence of privately owned otrubs in the middle of their communal arable. Apart from fears on the location of the otrubs and khutors, some non-separators may have been prompted to oppose the separation of their neighbours through jealousy; it was argued by one peasant in Bezhetskiy uyezd that, "some peasants have begun to agitate for the formation of khutors but the commune always interferes and objects Four of us asked the commune to allot us our land in one parcel but it would not agree. This is because the other peasants are jealous: they are afraid that we will do better than them" (38).

Opposition on the part of the commune to individual separation sometimes resulted in a potential separator withdrawing his application to enclose. When, however, a peasant did proceed with his application, the commune, if it had any say in the matter, would allot him the poorest and remotest land in the village. For example in Sireyka village, Samara, two peasant households each entitled to two land allotments decided to separate. One of the households insisted that his land be consolidated close to his dwelling in the village but the commune allowed this only on condition that he surrender one of his allotments and return it to the commune. The other householder was not prepared to forfeit part of his land and so the commune gave him his holding at a distance of 5 versts from the village.

In other cases, as for example, in Russkaya Selitba, also in Samara, the commune would allot to the separators their due share of arable but refused them a plot of hayland. And rarely did the commune allow individual separators to retain their rights in the communal pastureland. The intensity of conflict between the separators and non-separators is perhaps best illustrated by the account given by one peasant of his secession from Sorokina village, Tver in 1910: "when I applied to secede the muzhiks behaved abominably, they shouted and made a din but all the same I would not back down. I agreed to take any land whatever it was like only it had to be in one place in the end I received it stuck out of the way in a corner, of worthless quality; much had been cropped year in year out with flax and had finally been completely abandoned, and needless to say it had never seen an ounce of manure. This was the best part of my holding, the rest, more than a half, was covered with stones and every type of weed imaginable the

commune would not give me any hayland and it refused to take my livestock into its herd on the common and pasturing them on my otrub was very difficult" (39).

Although some communes did manage to prevent individual enclosure, the individual secessionists were always able to appeal to the Land Settlement Committee to resolve the conflicts and the Committee seems almost always to have ruled in their favour, although supposedly acting as mediator and impartial judge. In fact, reading through the petitions sent to the Committee by peasant communes, it is impossible to escape the conclusion that the fear expressed by the non-separators that their best land would be taken by the secessionists, was very often justified. Description of two 'petitions of complaint' sent by peasants to the Tula and Samara Land Settlement Committee illustrate the point. In Tula, one peasant, Kuzovlev, purchased in 1907 9 desyatinas of land in twenty five separate parcels from a number of his poor neighbours. This land, according to the petitioners was "wasted, abandoned and at a great distance from the village and the peasants had not sown or fertilised it but rented it out annually until the law enabled them to sell it". Kuzovlev then decided to enclose but, with the help of the Land Settlement Committee, he "took the best quality land and returned the twenty five parcels to the commune". The petitioners had, it would seem, cause for complaint - "for nearly one hundred years it (Kuzovlev's otrub) has been in our hands and has never been rented out or even repartitioned. We have expended much energy on it and it has helped to support us all these years but now it has been taken. What sort of law is this? the land is forcibly wrested from the peasants who have all their lives depended upon it and the Government gives it to a single 'speculator' making him into a 'little noble' leaving the rest of us with only empty and wasted strips". The Land Settlement Committee refused to reverse its decision arguing that the peasants had "no grounds for complaint" (40).

In Stepnaya Shantala village, Samara, a group of households wanted to enclose, but no agreement could be reached at the communal assembly about the section of village land to be allotted to them. The situation was particularly complicated here because the village was divided into flat, productive land in the south west and a less productive plateau area in the north and neither the separators nor the non-separators wanted to be confined to the latter. The Land Settlement Committee allotted the south west portion to the separators. The non-separators complained in a formal petition to the Committee, but their

complaint was not upheld, and enclosure proceeded in accordance with the original proposals (41). There can be little doubt that cases such as these aroused, with very good reason, the hostility of peasants in the commune and merely served to strengthen their resolve to be as un-co-operative as possible with the secessionists.

IV - 8. Summary

No one single explanation can be given for the variation in the response of the peasants to the enclosure movement in different provinces of Russia for so many factors were involved not all, but probably the most important, of which have been outlined above. It was the combination and relative weight of the factors which, on the one hand stimulated enclosure and, on the other, retarded it that determined the relative success of the movement in any given province and the same was obviously true at the uyezd, volost and even commune level.

Resistance to enclosure among the rank and file of the peasantry was evidently strong in both Tver and Tula and it was primarily this that prevented the movement from developing rapidly. In Tula, this resistance was due mainly to the fact that the vast majority of peasants in the Province were simply too poor and had too little land to make enclosure a worthwhile proposition; the basic problems of land shortage and rural overpopulation were particularly acute, far more so than elsewhere in European Russia. Other factors contributing to the widespread resistance to enclosure were of relatively minor significance.

In Tver, land shortage and poverty, although by no means absent, were certainly less of a problem than in Tula and therefore can account only in part for the resistance to enclosure. Here other factors were equally, if not more, important in shaping the peasants' attitudes to the movement. Perhaps the principal of these was the widespread involvement of peasant households in off-farm employment.

While the failure of the enclosure movement to develop in both Tula and Tver can to a large extent be attributed to the opposition, for whatever reasons, of the peasants to land reorganisation, in both Provinces other contributory factors, namely the complexity of legal relationships existing between groups of peasants and the extreme fragmentation of village lands, had an influence on the course of events. Extensive Group Land Settlement work had to be undertaken before enclosure itself could proceed and thus, even if the majority of peasants had

expressed a desire to enclose their land, they would have been forced to wait a considerable length of time before they would have been able to do so.

In Samara Province and particularly in the southern uyezds conditions were in contrast on the whole favourable for the adoption of enclosure. Here the relative absence of village land fragmentation, the uniformity of physical conditions, the land abundance of the majority of peasant households and the purely agricultural nature of the Province's economy had meant that long before the passing of the Stolypin legislation in 1906 the commune had begun to weaken and peasant farming had begun to assume a commercial character. The 'cause and effect' of the decline of the commune on the one hand and the growth of commercial farming on the other is difficult to determine - the commune may have been forced into decline because it stood in the way of the growing commercial tendencies of peasant farming or, alternatively, the already loose communal control may have merely provided ideal conditions for the development of commercial farming once the Russian and European markets for agricultural produce expanded. But, together, these two trends, obviously interrelated, enabled and stimulated the peasants in the Province to enclose their land.

NOTES TO CHAPTER IV

1. Mosse, op.cit., p.273.
2. Mozzhukhin, op.cit., p.89.
3. Quoted from Robinson, op.cit., p.67. For a discussion of the differences between the commune and rural society see p.p.67 - 70 and also Taniuchi, Y., Notes on Territorial Relationships between rural societies and settlements and communes, Birmingham C.S.E.S. Discussion papers.
4. 'Single-planned villages' is a literal translation of the term odnoplannyee derevni which applied to the situation where a number of separate villages shared some land in common.

5. Zemleustroyenyye Khozyaystva, op.cit., section g; The choice of uyezds for investigation.
6. Kofod, A.A., Khutorskoye Rasseleniye G.U.Z.i.Z. St. Petersburg, 1907; Discussion of 'external land fragmentation' (Vnenadel'naya cherespolosnost') as an obstacle to enclosure in Chapter 8.
7. This happened most frequently when the common land involved was natural pastureland for small villages could use it to maintain livestock in numbers far in excess of those that would have been possible had land been allotted separately.
8. Dela po Zhalobam Krest'yan Raznykh Gubernii na Postanovleniya Zemleustroyennykh Komitetov, Ts.G.I.A.L.; Fond 408, opis 1, 1913, No. 451. Doklad 3-ogo Maya 1913.
9. Delo o Razreshanii Krest'yanam Prodat' Zemli, Ts.G.I.A.L.; Fond 1291, opis 71, 1896 - 7. No. 622.
10. Dela po Zhalobam Krest'yan Raznykh Gubernii na Postanovleniya Zemleustroyennykh Komitetov, Ts.G.I.A.L.; Fond 408, opis 1, 1913, No. 451. Doklad 3-ogo Maya.
11. Sel'skokhozyaystvennyy Obzor Tverskoy Gubernii za 1909 god, op.cit., Ch.1 - Progressivnyye Tycheniya v Krest'yanskom Khozyaystve
12. Pamyatnaya Knizhka Samarskoy Gubernii za 1910, Samara, 1911, p.69.
13. This method of enclosure is described in Pamyatnaya Knizhka Samarskoy Gubernii za 1910, op.cit., p.p.65 - 69.
14. For example, if the size of one allotment in a commune was three desyatinas, a household that was particularly anxious to receive its otrub on the best land could agree to accept a reduction in the size of its individual allotment to $2\frac{3}{4}$ desyatinas. The auction method of enclosure is described in Kofod (1907) .. op.cit., Ch.7.

15. Pamyatnaya Knizhka Samarskoy Gubernii za 1909, op.cit., p.30.
16. Delo 1914. O Vydache Posobii i Dopolnitel'nykh Ssud, Ts.G.I.A.L., Fond 408, opis 1, 1914, No.1376.
17. Ibid., 3rd June, 1913.
18. Itogi Rabot za Posledneye Pyatiletiye (1909 - 1913), G.U.Z.i.Z., St. Petersburg, 1914, p.21.
19. Trudy Mestnykh Komitetov, op.cit., Tom XLII, p.214.
20. Ibid., p.290.
21. Pamyatnaya Knizhka Samarskoy Gubernii za 1911, Samara, 1912, p.12.
22. Ibid., p.14.
23. Dubrovskiy, op.cit., p.267.
24. Chernyshev, I.V., Obshchina Posle 9 Noyabrya 1906, In I.V.E.O., Petrograd, 1917, chast' II, p.62.
25. Sel'skokhozyaystvennyy Obzor Tverskoy Gubernii za 1909 god, op.cit., Ch.2 - O Khutorakh i Otrubakh.
26. Ibid., Ch.2.
27. Quoted from Levachev, op.cit., p.147. His ref.; Arkhiv Samarskoy Gubernii, Zemskii fond 1914.
28. Ob Uchrezhdenii Zemleustroyannykh Komissii, Ts.G.I.A.L.; Fond 592, 1906, opis 1, No.616.
29. Statisticheskoye Opisaniye Rzhevskogo Uyezda, op.cit., p.102.
30. Delo o Khode Zemleustroystva v Raznykh Guberniyakh, Ts.G.I.A.L.; Fond 408, opiz 1, 1911, No.42.

31. Printsipy Zemel'nogo Nadeleniya v Svyazi s Otnosheniyem Naseleniya k Raznym Formam Zemlevladieniya i Zemelepol'zovaniya;
Statisticheskiy Otdel Samarskogo Gubernskogo Zemstva. Samara, 1917, p.17.
32. Trudy Mestnykh Komitetov, op.cit., Tom XLII, p.290.
33. Mozzhukhin, op.cit., p.232.
34. Printsipy Zemel'nogo Nadeleniya v Svyazi op.cit., p.20.
35. Ibid., p.20.
36. Kofod, (1914), op.cit., p.58.
37. Pamyatnaya Knizhka Samarskoy Gubernii za 1911, op.cit., p.20.
38. Sel'skokhozyaystvennyy Obzor Tverskoy Gubernii za 1909 god, op.cit., Ch.1 - Progressivnyye Techeniya v Krest'yanskom Khozyaystve.
39. Solovev, A., Kak ya Vydelilsya iz Obshchiny i pervyye moi shagi na Obtrube; In Sel'skokhozyaystvennyy Listok, Tver. May 1914.
40. Dela po Zhalobam Krest'yan Raznykh Gubernii na Postanovleniya Zemleustroyennykh Komitetov, Ts.G.I.A.L.; Fond 408, opis 1. 1913. No.451
41. Pamyatnaya Knizhka Samarskoy Gubernii za 1911, op.cit., p.p.30-31.

PART II

ENCLOSURE AND AGRICULTURAL PROGRESS

CHAPTER V

ENCLOSURE AND AGRICULTURAL PROGRESS - THE ADVANTAGES OF THE ENCLOSED FARMS

There is little doubt that in the latter decades of the nineteenth century and the first two of the twentieth century there was a trend towards the improvement of the standard of farming in almost all provinces of European Russia, although it varied in intensity. Whether this trend was more marked on the enclosed than the non-enclosed farms is the subject of the present and subsequent chapters.

Official investigations made of enclosed farms present a favourable picture of the changes that took place in farming as the result of the adoption by peasants of the Stolypin Reform. A number of authors have accepted the findings at their face value, Pavlovsky, for one, arguing that, "seeing that the enclosure movement only began in 1907 the rapidity of the technical transformation of peasant farming resulting from the reorganisation of tenure was indeed striking" (1). Other authors hold the opposite view. Dubrovskiy, for example, came to the conclusion that: "The 'progress' of the khutors and otrubs was very limited. The Stolypin Reform did not result in any major turnabout in farming even on the farms of the kulaks" (2). And Mosse that: "The available evidence suggests that, contrary to expectation, it's (enclosure's) effect on peasant farming in the shape of improved methods and productivity was only marginal" (3).

These contradictory statements would each seem to have an element of truth for, just as the pattern of adoption of the Stolypin Reform showed a marked regional variation, so too did the degree to which the enclosed farms were successful. In some provinces, agricultural progress on the enclosed farms was considerable and the khutors and otrubs were certainly more advanced than farms in the commune. Elsewhere little change took place as a result of enclosure in the type of farming practised.

With or without the improvement of farming, however, the mere fact of enclosure was often sufficient to give the peasant farmer a considerable advantage over his neighbours remaining in the commune

and to guarantee him an increase in agricultural output. This the authors of the Stolypin Reform were quick to point out. In the first place, consolidation of the land brought with it economies in the time and energy expended by the peasant moving about his farm. Secondly, it enabled all the peasant's land to be brought into productive use - the abandonment of land due to inaccessibility and excessive distance was less likely to occur on an enclosed farm than in the commune. Thirdly, but slightly more questionable, consolidation reduced the risk of crops being destroyed through fire or the tramping of livestock. But perhaps the main factor, barely mentioned by the officials, that ensured that the enclosed farms would appear to be successful and to prosper was that the majority of them from the outset had a far more favourable resource base than did farms in the commune.

Clearly, therefore, before any discussion of the system of farming adopted on the enclosed farms in Tver, Tula and Samara can proceed it is necessary to examine how well endowed with resources were the peasant farms that were enclosed compared with the farms that remained in the commune.

V - 1. The Land Resource Base of the Enclosed Farms in Tver, Tula and Samara

Given that almost everywhere extensive systems of farming were the rule, the best measure of the economic strength of peasant households in the three Provinces is the amount of land they owned; whether the peasant had surpluses to sell or himself had to purchase grain was determined by the size of his land holding. As already observed in Chapter II, the average size of peasant farms was different in the three Provinces, as was the amount of land actually required for the peasant to make a reasonable livelihood. In all three, however, there were peasant farmers who, during the years following Emancipation, had been able through various means to acquire more land than their fellows, some of whom had thereby managed to increase their stock of capital in whatever form. It was from this group that the majority of peasants who enclosed their land would appear to have been drawn.

In Tables 46 and 47, the average size of the enclosed and non-enclosed farms and their distribution by size classes is shown in a number of uyezds of the three Provinces.

Table 46

Average Size of Farms by Type in Selected Uyezds of the
Three Provinces

Uyezd	*	Enclosed:			
		Non-enclosed	On allotment land khutors	otrubs	On the land of the Peasant Land Bank khutors otrubs
Rzhevskiy (1)	10.4	14.1	12.2	N.D.	N.D.
Yepifanskiy (3)	7.6	N.D.	N.D.	16.6	14.6
Bogoroditskiy (9)	7.3	N.D.	9.3	18.5	N.D.
Samarskiy **	15.4	15.0		N.D.	
Stavropolskiy	12.3	15.7			
Buguruslanskiy	19.3	17.5			
Bugulminskiy	14.8	16.1			
Buzulukskiy	24.5	22.4			
Nikolayevskiy	29.6	32.1			
Novouzenskiy	42.5	27.4			

* From Statistika Zemlevladieniya (1905).....op.cit. Figures include allotment and purchased land

** Pamyatnaya Knizhka (1911).....op.cit.

In nearly all cases the enclosed farms were considerably larger than the non-enclosed (and, correspondingly, a proportionately greater share were included in the upper size groups and a smaller share in the lower groups). The difference, however, was greater in Tver and Tula Provinces than in Samara. In Samara, in all but three uyezds, the enclosed farms were much the same size as the non-enclosed and in Novouzenskiy uyezd they were actually smaller. If contemporary reports are to be believed, and the figures would tend to bear this out, enclosure was adopted in Samara with equal enthusiasm by peasants belonging to all socio-economic

Table 47

The Distribution of Enclosed and Non-Enclosed Farms by Size
in Selected Uyezds of the Three Provinces

		Rzhevskiy uyezd (1) 1912			enclosed farms on land of Peasant Land Bank
Size of Farm	Area of sown land (in desyatinas)	non- enclosed	otrubs	khutors	
	0.01 - 1.0	15.2	7.2	10.1	-
	1.01 - 2.0	21.2	15.6	13.3	6.9
	2.01 - 3.0	22.6	18.1	17.5	10.3
	3.01 - 4.0	17.9	18.0	14.0	10.3
	4.01 - 5.0	9.9	13.0	17.5	3.4
	5.01 - 6.0	5.5	7.3	11.7	17.2
	6.01 - 7.0	3.1	5.3	5.3	6.9
	>7.01	4.6	11.9	10.6	44.8
	Total	100.0	100.0	100.0	100.0
		Bogoroditskiy uyezd (9) 1911			
	<3.0	19.1	12.5	-	
	3.01 - 6.0	33.9	35.2	5.7	
	6.01 - 12.0	32.7	30.5	34.3	
	12.01 - 20.0	10.3	10.9	25.7	
	>20.01	4.0	10.9	34.3	
	Total	100.0	100.0	100.0	
		Yepifanskiy uyezd (12) 1911			
	None	3.2	3.6	-	
	0.01 - 3.0	44.1	27.1	31.7	
	3.01 - 6.0	30.7	33.4	30.0	
	6.01 - 10.0	15.5	27.4	15.0	
	>10.01	6.5	8.3	23.3	
	Total	100.0	100.0	100.0	
		Nikolayevskiy uyezd (3) 1913			
	<5.0	1.2	5.5		
	5.01 - 10.0	11.7	3.0		
	10.01 - 15.0	17.1	10.3		
	15.01 - 25.0	28.5	46.0		
	>25.01	41.5	35.3		
	Total	100.0	100.0		

groups in the commune. In 1910, officials investigating the course of the enclosure movement in provinces east of the river Volga reported that, "the advantages of enclosure are obvious not only to the richest peasants: an awareness of the advantages has diffused into a whole series of rural societies regardless of the greater or lesser amount of land that individual members hold" and further that, "together with the land abundant villages those suffering from land shortage are also enclosing their land" (4). It was noted that even some of those peasant households which in 1861 had received only 'beggarly allotments' (darstvennyy nadel) had enclosed after 1906. The contrast with reports emanating from Tula Province was striking. Summarising the situation in the northern black-earth provinces, Pershin wrote, ".... here the difference between the khutors and otrubs and the normal peasant farms was at its greatest suggesting that in these areas there was a 'decanting off' of the well endowed minority" (5).

While it is not disputed that a sizeable portion of the peasant households that enclosed their land in Samara Province had smaller than average land allotments, it is possible to take issue with the claim that this indicated that the landshort were 'aware of the advantages' of enclosure and, implicitly, in favour of it. In Samara, it must be remembered, the dominant method of khutor and otrub formation was through communal enclosure. It is possible that peasants with small land allotments enclosed, not through any desire on their own part, but simply because they had no option to do otherwise in the face of the decision of the majority. This argument is all the more plausible because the landshort constituted the minority of households in the Province. The dominance of communal over individual enclosure, the reasons for which have been discussed elsewhere (p.121), could also explain why some landshort households enclosed in Tver. Further, it is interesting to note that the group of otrubs investigated by Mozzhukhin in Bogoroditskiy uyezd in Tula Province, which corresponded very nearly in their size distribution to farms in the commune, all arose as a result of communal enclosure.

It is not argued, however, that all the landshort households that enclosed did so involuntarily. Some certainly were in favour of enclosure, either because they truly believed that they could farm more efficiently on enclosed farms and others because they wished to liquidate their holdings, and to sell consolidated land was more

profitable than to sell unconsolidated. Dubrovskiy is in favour of the second explanation arguing that, "this (enclosure by the landshort) is explained by the fact that many of them consolidated their allotments in order to sell it at a high price: land which was in hereditary ownership and was in the form of a khutor or otrub as a rule had a higher market value than did land in the form of fragmented parcels" (6).

For the purposes of the present discussion it is not important, however, to know why some landshort households enclosed, but rather to examine what was their subsequent fate. During the years after 1906 a fairly large number of enclosed farms were sold by their owners and the evidence from the investigations carried out in Tver and Samara suggests that it was primarily the smaller farms that followed this course of action (Table 48).

Table 48

The Sale of Enclosed Farms in Nikolayevskiy and Rzhevskiy Uyezds⁽³⁾

Size of farm (in desyatinas)	% number of farms in size groups that were sold after enclosure	
	Nikolayevskiy	Rzhevskiy
<5.0	58.3	13.4
5.01 - 10.0	28.7	7.2
10.01 - 15.0	14.2	1.8
15.01 - 25.0	14.9	1.4
>25.01	13.9	-
Total	16.5	7.0

The annual report of the Samara Land Settlement Committee confirms that this was the case where at least Samara was concerned: "The enclosure of their (the landshort's) allotment land into otrubs has already given rise to a significant number of landless peasants for whom the only course of action now is migration to Siberia" (7). Thus, although present at the time of the various investigations, it is probable that a number of the small enclosed farms in the three Provinces would have disappeared in the course of time and in consequence that the disparity in size between the enclosed and non-enclosed farms would have increased.

Even accepting all the figures at their face value, however, it still remains true that the enclosed farms as a group were larger than the non-enclosed in the uyezds investigated.

The enclosed farms would thus seem to have had a distinct size advantage over the farms remaining in the commune. This assumption made by many at the time, was challenged, among others, by Mozzhukhin. Mozzhukhin on the basis of his survey of enclosed farms in Bogoroditskiy uyezd, argued that the size advantage that the enclosed farms possessed was in reality illusory, since the average size of family was greater on the enclosed farms than the non-enclosed. He maintained that the man/land ratio at the time when the Stolypin Land Reform was introduced was the same on all types of peasant farms in the uyezd and this, he said, was the natural corollary of the practice of repartitioning in the commune. To an extent Mozzhukhin's argument had foundation, but only where peasant allotment land was concerned: repartitioning, which in Tula continued to be practised right into the twentieth century (8) did preserve equality between households in the amount of allotment they held so that those households that enclosed probably did not have more per head than did the households remaining in the commune. Mozzhukhin failed, however, to take into consideration the effect of purchased and rented land on man/land ratios. On khutors and otrubs in Bogoroditskiy uyezd, purchased and rented land made up a large percentage of the total land in the use of peasant, larger than on farms in the commune; the result was to render more favourable their man/land ratios (see Table 49 overleaf). This observation was made by Dubrovskiy in his criticism of Mozzhukhin's argument: "On the otrubs, and to a greater extent on the khutors, the most important type of land was not allotment but purchased and rented the larger amount of purchased land especially in the hands of the khutor farmers shows without doubt that the difference in the size of farm did not depend only on the size of family" (9).

It was the possession of sizeable quantities of purchased and rented land that was responsible for man/land ratios in Tver also being more favourable on the enclosed than on the non-enclosed farms (Table 49). In Tver, inequalities existed, however, even in the amount of allotment land per head. This presumably was a reflection of the fact that in the Province repartitioning had long since ceased to be practised in the majority of communes (10). Over the years therefore disparities had been able to develop in the amount of allotment land held by households

Table 49

Man/Land Ratios on Farms of Different Types and Sizes in
Rzhevskiy and Yepifanskiy Uyezds (in desyatinas)

Uyezd and Size of Farm:	Non-Enclosed			khutors			otrubs		
Rzhevskiy(1) Distribution of farms by size of sown area (in desyatinas)	average size of family (1)	average allot- ment per head (2)	average allot- ment and purch- ased per head (3)	(1)	(2)	(3)	(1)	(2)	(3)
None	3.6	0.7	0.9	4.1	1.4	1.4	3.8	2.3	2.2
0.01 - 1.0	4.9	0.6	0.9	5.7	1.2	1.4	5.2	1.1	1.2
1.01 - 2.0	5.4	1.0	1.3	5.8	1.8	1.9	5.5	1.2	1.5
2.01 - 3.0	6.2	1.2	1.6	5.7	2.2	2.3	5.7	1.4	1.6
3.01 - 4.0	6.7	1.4	1.8	5.8	1.8	2.2	6.7	1.4	1.7
4.01 - 5.0	7.3	1.4	1.9	7.1	1.6	1.9	7.0	1.5	1.9
5.01 - 6.0	8.0	1.4	2.0	8.0	1.6	1.8	7.3	1.5	1.9
6.01 - 7.0	8.4	1.4	2.2	7.8	1.5	1.7	7.4	1.5	2.2
>7.01	9.2	1.3	2.8	12.0	1.8	2.7	8.6	1.6	2.7
Total	6.2	1.2	1.7	6.8	1.8	2.1	6.5	1.4	1.9
 <u>Bogoroditskiy</u> (9) Distribution of farms by area of all land in use (in desyatinas)									
0.01- 3.0		NO DATA		-	-	-	3.4	0.7	0.7
3.01 - 6.0		NO DATA		5.5	0.8	1.0	5.1	0.8	0.9
6.01 - 12.0		NO DATA		5.9	0.5	1.6	8.5	0.8	1.0
12.01 - 20.0		NO DATA		8.3	0.8	2.0	8.8	0.8	1.8
>20.01		NO DATA		13.7	0.7	2.3	9.9	0.8	2.5
Total	6.5	0.8	1.1	9.2	0.7	2.1	6.9	0.8	1.3

in the commune. The data for Rzhevskiy uyezd in Tver are particularly interesting for they allow a comparison to be made of the man/land ratios of the various types of farm in different size classes. It is evident that with few exceptions the ratio of allotment and purchased land (Column 3 in Table 49) to population was greater on enclosed farms of all sizes than on equivalent farms in the commune, but that the difference was greatest between the khutors and non-enclosed farms. Where Samara Province is concerned it has not been possible to calculate man/land ratios for the farms that were enclosed after 1906. Those of the pre-1906 enclosed farms are presented in Chapter VIII and it is evident that for all groups they exceeded those in the commune.

V - 2. Livestock and Farm Implements in the Ownership of the Households that Enclosed

Judging from the figures relating to the amount of land per head of population, there can be little doubt that the majority of households that enclosed their land were, as suggested at the beginning, the more prosperous members of the commune. This thesis is further borne out if the number of livestock and farm implements in the ownership of households at the time of enclosure is examined.

As Table 50 overleaf shows, in both Rzhevskiy and Bogoroditskiy yezds the number of all types of livestock - working and productive alike - in the ownership of households that enclosed their land tended to exceed the number in the ownership of households that remained in the commune and, furthermore, the percentage number of households which did not own a horse or cow or any livestock was lower. In Bogoroditskiy uyezd, confirming Pershin's argument, the difference was particularly pronounced. Predictably, the peasants who moved on to khutors were better stocked than were those who consolidated their land into otrubs.

The same picture is repeated where farm implements and machinery were concerned, the peasants who enclosed their land being better equipped than were their neighbours (Table 51 overleaf). Moreover among the peasants who moved on to khutors the ownership of the more expensive modern agricultural machinery - harvesting machines, threshing and winnowing machines, iron ploughs and harrows - was more widespread than among peasants remaining in the commune.

Table 50

Livestock on Peasant Farms that were Enclosed in Selected Uyezds
of the Three Provinces Compared with Farms Remaining in the Commune

Uyezd and type of farm	Year	Per farm head of					% number of Households without			any live- stock
		horses	cattle	sheep	pigs	horse	cow			
<u>Bogoroditskiy (9)</u>										
Khutors) At time	2.1	1.1	8.6	0.2	3.6	7.1	3.6	3.6	
Otrubs) of enclosure	1.4	0.9	5.5	0.1	16.8	10.1	3.3		
Farms in Commune (2)	1911	1.2	1.0	4.6	0.1	22.2	17.3	13.2		
<u>Rzhevskiy (3)</u>										
Khutors) At time	1.8	1.9	1.9	0.8	4.4	3.6	2.2		
Otrubs) of enclosure	1.4	1.4	1.8	0.7	4.7	6.6	3.7		
Farms in Commune	1913	1.1	1.4	1.9	0.5	5.4	4.8	11.2		
<u>Nikolayevskiy (3)</u>										
Khutors) At time	5.8	3.3	10.6	3.3	5.5	5.5	5.5		
Otrubs) of enclosure	3.5	1.9	7.2	1.1	11.3	10.2	4.0		

Table 51

Farm Implements and Machinery on Peasant Farms that were Enclosed in
Selected Uyezds of the Three Provinces Compared with on Farms
Remaining in the Commune

Per 100 households number of:									
Uyezd and type of farm		Year							
<u>Bogoroditskiy (9)</u>									
Khutors) At	121.0	79.0	50.0	100.0	-	-	-	
Otrubs) time of enclosure	100.0	34.0	64.0	40.0	-	-	2.0	29.0
Farms in commune(2)) 1911	106.7	53.0	70.1	60.7	0.5	-	0.2	32.0
<u>Rzhevskiy (3)</u>									
Khutors and) At	7.0	146.0	1.0	166.0	5.6	0.0	0.2	0.8
Otrubs) time of enclosure								25.3
Farms in commune(1)) 1913	NO DATA							
<u>Nikolayevskiy (3)</u>									
Khutors and) At	1.6	84.7	0.2	380.3	7.6	4.3	24.2	2.2
Otrubs) time of enclosure								23.9

V - 3. The Differences in Resource Endowment of the Households that Enclosed

So far the enclosed farms have been treated very much as a single undifferentiated group. In effect, as has been shown, there were considerable differences in the scale of the resources owned by peasants moving on to different types of enclosed farm: khutors tended to be considerably larger, have more favourable man/land ratios and more livestock and farm implements than otrubs, while enclosed farms formed on the land of the Peasant Land Bank had a more favourable resource base than those formed on allotment land. These differences were only to be expected and they reflected the differential costs involved in the formation of various types of farm; since it was an expensive operation (p.172/3) it was usually the relatively more prosperous peasants who moved on to khutors or purchased land from the Peasant Land Bank. The less prosperous evidently contented themselves with enclosing their allotment land into otrubs.

Within the various groups of peasant households that enclosed, however, there were, in addition, considerable differences in resource ownership; although not perfect, there was a direct relationship between the increase in farm size and the amount of land owned per head of population (Table 49). And, as Table 52 shows, in Bogoroditskiy uyezd at least, the larger the land resource base of peasant farmers who enclosed the greater was the number of livestock and modern agricultural machinery owned. The peasants who enclosed their land, whether in khutors or otrubs, were evidently drawn from a wide spectrum of economic classes in the commune; among them there were those who, according to Lenin's classification, could indeed be included in the ranks of the 'rich', 'middle' and 'poor' peasant classes.

V - 4. Enclosure and Agricultural Progress: the Preconditions

On the basis of the evidence presented above, the productivity per head on the enclosed farms would in all probability exceed that on the non-enclosed farms but there was no guarantee that after enclosure the productivity of the land would increase. This latter depended upon whether or not more intensive and modern systems of farming were

Table 52

Ownership of Livestock and Agricultural Machinery at the Time of
Enclosure in Bogoroditskiy Uyezd by Size of Farm (9)

Type and size of farm on to which peasant moved	Per Household number of				Per 100 households number of		
					mech- anical mowers	thresh- ing machines	winnow- ing machines
	horses	cows	sheep	pigs			

Otrubs

0.01 - 3.0	0.4	0.7	1.9	-	-	-	-
3.01 - 6.0	1.0	0.9	4.3	-	-	-	5.0
6.01 - 12.0	1.5	0.9	5.8	0.2	-	3.0	10.0
12.01 - 20.0	2.0	1.2	6.2	0.1	8.0	12.0	31.0
>20.01	2.4	1.2	11.3	-	8.0	23.0	38.0
Average	1.4	0.9	5.5	0.1	2.0	5.0	12.0

Khutors

3.01 - 6.0	0.5	0.5	2.5	-	-	-	-
6.01 - 12.0	1.5	0.9	4.0	0.1	-	25.0	19.0
12.01 - 20.0	2.0	1.0	6.7	0.3	-	14.0	21.0
>20.01	2.8	1.6	14.6	0.2	-	45.0	55.0
Average	2.1	1.1	8.6	0.2	-	29.0	47.0

adopted by the peasants who enclosed their land. Where the introduction of new methods in farming was concerned, the enclosed farms did, of course, have one very important advantage over the non-enclosed, namely that the peasant was free from constraints exercised by the commune over his decision-making autonomy. As a result of enclosure, as was emphasised by all the proponents of the Stolypin Reform, the peasant farmer could begin to exercise his 'individual initiative' and could freely introduce whatever system of farming he liked on to his land. Be that as it may, the introduction of an up-to-date system of farming whether on to enclosed or, indeed, non-enclosed farms required that two prior conditions be met: first, the peasant had to have capital to improve farming - intensification was an expensive operation because new machinery, livestock, fertilisers and treated seeds had often to be purchased and, secondly, the peasant farmer had to have the basic knowledge of how to intensify.

The first condition has to an extent been covered. Simply by virtue of the fact that the enclosed farms had more land relative to population than the non-enclosed it is likely that a proportionately greater number were in a position actually to make a profit from farming and thus to accumulate the capital required for intensification. This is not to say, however, that all enclosed farms or even the majority were in this position. Where the second condition is concerned, it is clear that knowledge of new techniques in farming was independent of farm type. It can be argued that the peasants who enclosed their land were probably more receptive to new ideas since they were evidently prepared to take risks; nevertheless they still had first to be exposed to the ideas and this was outside the realms of their control.

In the dissemination of knowledge about the intensification of farming the Government had a vital role to play. But it proved, as the evidence from Tver, Tula and Samara will show, not to be very effective in this role.

NOTES TO CHAPTER V

1. Pavlovsky, op.cit., P.280.
2. Dubrovskiy, op.cit., p.306.
3. Mosse, op.cit., p.273-274.
4. 0 Poyezdke v Sibir' i Povolgu v 1910. In Izvestiya G.U.Z.i.Z., No.46. St. Petersburg, 1910, p.1072.
5. Pershin, op.cit.
6. Dubrovskiy, op.cit., p.257.
7. Taken from Levachev, op.cit., p.138. Quoting from archive source - Archiv Samarskogo Gubernskogo Zemleustroyennogo Komiteta, 1909.
8. In Bogoroditskiy uyezd, so the household census for 1911 recorded, 58.3% of all communes had undertaken a radical repartition during the twenty years leading up to the Stolypin Reform and 15% within the last five years.
9. Dubrovskiy, op.cit., p.260.
10. According to the Witte Commission's report, repartitioning in Tver Province had ceased to be practised in most communes. Over half the communes did not repartition at all during the interval 1858 to 1900 and of the remainder over three-quarters had done so only once.

CHAPTER VI

ENCLOSURE AND AGRICULTURAL PROGRESS - THE CASE OF TVER PROVINCE

At the time of the inauguration of the Stolypin Land Reform the standard of peasant farming in Tver Province was low. The three-field system, which was practised in the majority of communes, while serving the needs of the population well in the past, already by the end of the nineteenth century had been forced out of equilibrium with the environment; the extension of the arable consequent upon population increase and the corresponding decline in the area of natural hay and pastureland had resulted in a decline in the head of livestock that could be kept on peasant farms. This in turn had led to a reduction in the amount of organic fertiliser produced, and fertiliser was essential if the poor, acid podzols of the Province were to be productive. The net result of these changes was that the fertility of the soil in Tver declined and this decline was exacerbated by the introduction towards the end of the nineteenth century of flax cultivation in the spring field of many communes (p.p.86-93).

Consequently by the beginning of the twentieth century one of the principal problems confronting peasants in the communes of Tver was how to offset the decline in the fertility of the soil and this, except in the case of the fortunate few who could afford to purchase artificial fertilisers, usually resolved itself into the question of how to increase the size of the livestock feeding base. The solution to the problem lay in the introduction of four or multiple-field rotations, incorporating the cultivation of ley grasses, in the place of the three-field system. While recognised by some, this solution often proved difficult to adopt and, as noted in Chapter II, the number of peasant communes which had begun to cultivate ley grasses or had abandoned the three-field rotation by the twentieth century was still small. In many communes the suggestion to change to a more progressive field rotation was put forward by some peasants but was rejected by the majority. "Although I have more than once said 'come on let's grow clover'", lamented one peasant in Kalyazinskiy uyezd, "the other peasants haven't paid any attention to

my words and have replied 'we've got enough hay already' and some have added 'if we grow clover there will be nowhere to sow rye'" (1).

For such a peasant the obvious course was to enclose his land. The desire to introduce on to their land more intensive systems of farming must have been the driving force behind the decision on the part of some peasants to enclose in Tver. How numerous they were and whether, as a result, the productivity of their farms increased is discussed below.

VI - 1. The Enclosed Farms Investigated in Tver Province: Sources of Information

Two principal sources of material have been used for the analysis of the system of farming introduced on to the enclosed farms in Tver Province. Both relate to one uyezd, Rzhevskiy, situated in the south of the Province. The first is the zemstvo household census of 1912 (2). This contains data on various aspects of the economy on different types of farm in the uyezd - those in the commune, khutors and otrubs. Since all farms in the uyezd were included in the enumeration the census constitutes a particularly reliable source and also allows direct comparisons to be made between enclosed and non-enclosed farms - a comparison which has proved to be more difficult for Tula and Samara Provinces. The data in the census are presented for each type of farm by volost, so that for the most part it has been necessary to deal with average totals. In one section, however, the data are presented according to farm size in the uyezd as a whole. Unfortunately, in this section, the range of data recorded is limited, the all important information on crop distributions, land use and the ownership of farm implements and machinery being excluded.

The second source is the investigation conducted in 1913 of enclosed farms by the G.U.Z.i.Z. (3). Rzhevskiy was one of the twelve yezds selected for the survey. The sample consisted of 22.1% of the enclosed farms in the uyezd of which 37.9% were khutors and 62.1% otrubs. All of the farms sampled had been in existence for at least three growing seasons before the investigation was made, so that there had been sufficient time for them to 'settle down' and for new systems of farming to have become established. It is apparent in comparing the returns of the official investigation with those of the 1913 G.U.Z.i.Z.

census that the sample of farms chosen by the Government was biased in favour of the more successful. For example, a disproportionately large number of khutors were investigated - in reality they constituted only 18.6% of the enclosed farms in the uyezd and khutors usually did better than otrubs. The investigation, nevertheless, does serve to demonstrate the maximum possibilities after enclosure.

In the first part of the chapter, the changes that took place in various aspects of farming after enclosure are described and the enclosed farms are compared with farms in the commune. In the second part, these changes are analysed in relation to the systems of farming adopted and some assessment made of the impact on farm productivity. Finally, consideration is given to the question of state agricultural assistance programmes in Tver and how they affected enclosed and non-enclosed farms alike.

VI - 2. Aspects of Farming: the Enclosed and Non-Enclosed Farms Compared

VI - 2a. Land Use

One of the many advantages of enclosure stressed by the proponents of the Stolypin Reform was that it enabled the peasant farmer to extend the area of his land under arable (4). The extension of the arable was, it was argued, one of the first and most noticeable changes to take place on the peasants' farm after enclosure (5).

Whether it was the result of the ploughing up of virgin land or merely a carry over from the former situation of farms in the commune, the area of arable on the khutors and otrubs investigated by the G.U.Z.i.Z. in Rzhevskiy uyezd did have a larger percentage of their land under arable than did farms in the commune. (see Table 53 overleaf) A similar picture is presented by the returns of the 1913 G.U.Z.i.Z. census, although in this case the difference between the enclosed farms (particularly the khutors) and the non-enclosed farms was not so marked. (see Table 54 overleaf).

Like farmers in the commune, the peasants on the enclosed farms in Rzhevskiy uyezd purchased and rented land under different uses. The pattern of behaviour of the various sets of peasants seems, as Table 55 overleaf shows, in essence, to have been very similar. In all

cases the greater part of the land acquired through rent and purchase was under hay. This would seem to suggest that on the enclosed farms, like those in the commune, there was a shortage of this particular category of land in the peasants' ownership.

Table 53
Land Use on Enclosed and Non-Enclosed Farms in Rzhevskiy
Uyezd

Type of farm	Year	Arable	Hay	% of all land owned under:		
				Forest	Scrub and	Pasture
Non-enclosed (7)	1883	55.7	23.8	20.5		
Non-enclosed (1)	1912	50.3	33.2	6.7		9.8
Enclosed (1)	1912	69.0	21.9	9.1		

Table 54
Arable and Hayland on Enclosed and Non-Enclosed Farms in
Rzhevskiy Uyezd, 1913

Type of farm	% of all land in use under:	
	Arable	Hay
Non-enclosed (1)	45.5	54.5
Otrubs (3)	50.5	49.5
Khutors (3)	46.1	53.9

Table 55

Land Use on the Allotment, Purchased and Rented Land of the
Enclosed and Non-Enclosed Farms in Rzhevskiy Uyezd, 1912 (1)

Type of farm	Type of Land					
	Allotment; of which % under:		Purchased; of which % under:		Rented; of which % under:	
	Arable	Hay	Arable	Hay	Arable	Hay
Non-enclosed	58.6	41.4	33.2	66.8	21.7	78.3
Otrubs	61.2	38.8	40.7	59.3	18.5	81.5
Khutors	54.6	45.4	45.1	54.9	15.8	84.2
	Land Use					
	Arable % of which on:			Hay % of which on:		
	allot-	purch-		allot-	purch-	
	ment	ased	rented	ment	ased	rented
Non-enclosed	75.6	14.3	10.1	44.6	24.0	30.4
Otrubs	78.4	15.8	5.8	50.7	23.5	25.7
Khutors	81.7	11.7	6.6	57.9	12.1	30.0

VI - 2b. The Distribution of Crops

Comparison of the 1912 household census returned reveals that there were differences in the distribution of crops on the arable of the enclosed and non-enclosed farms in Rzhevskiy uyezd. The percentage of the sown area under winter crops, presumably rye, was considerably lower on the khutors and otrubs than on farms in the commune whereas that under spring crops - oats, flax, potatoes and minor grains - was higher. On the enclosed farms a greater percentage of the sown area was under clover than on the non-enclosed. The difference was greatest between the khutors and the non-enclosed farms:

Table 56

Land Use on the Arable of Enclosed and Non-Enclosed Farms
in Rzhevskiy Uyezd, 1912 (1)

Type of Farm	% of all arable in use under:			
	Fallow	Winter crops	Spring crops	Ley-grasses
Non-enclosed	29.9	30.2	32.9	6.9
Otrubs	24.5	26.5	39.2	9.9
Khutors	22.9	21.2	41.3	14.5

Interestingly, the portion of the arable left under fallow was considerably less on the enclosed farms than on the non-enclosed and hence more of the land must each year have actually been in productive use. This, combined with the fact that the area of arable on the enclosed farms was proportionately greater than on the non-enclosed, must have guaranteed to the peasants who had enclosed a larger output relative to the total area of land in their use than was possible in the commune. In particular, the volume of commercial crops produced (mainly those grown in the spring field) must have been considerably greater on the enclosed farms relative to the total land area than on the non-enclosed, and in this respect the khutors were without doubt in the best position.

A more detailed breakdown of the crops grown on the enclosed farms is provided by the G.U.Z.i.Z. investigation:

Table 57
The Distribution of Crops on Enclosed and Non-Enclosed Farms
Rzhevskiy Uyezd, 1913

Type of farm	% of sown area under:							
	Winter rye	Spring wheat	Oats	Barley	Pot- atoes	Flax	Ley- grasses	Others
Non-enclosed (8)	34.6	0.1	18.5	3.1	5.5	22.9	14.7	0.6
Enclosed (3)	26.1	0.1	12.8	3.4	3.9	27.9	25.8	0.0

From this it is evident that the crop distribution on the enclosed farms was more diversified than on the non-enclosed. Particularly noticeable is the very much greater share of the sown land under flax, the chief money earning crop on peasant farms in Rzhevskiy uyezd, and under ley-grasses, here nearly twice as much. According to the returns of the investigation, 82.5% of the farms sampled sowed some of their land to ley-grasses after enclosure compared with only 18% before.

VI - 2c. Livestock

One of the principal fears that many peasants had of enclosure was that withdrawal from the commune and the consequent loss of the possibility of communal grazing, whether on the common pastureland, the fallow or stubble, would result in them having to reduce their head of livestock (p.181). The proponents of the Stolypin Reform argued that this fear was groundless and that enclosure would, in fact, result in the 'rationalisation' of all aspects of livestock husbandry. Kofod, writing in 1907, predicted that on enclosure the number of cows, pigs and poultry kept on peasant farms would increase in response to the demands of the market. Meanwhile, the number of horses would decline because fewer would be required to work a consolidated holding than distributed parcels and similarly, the number of sheep would decline since, "now it is more useful to augment the cattle than to hold on to a few sheep" (6).

Kofod's predictions would seem to have had some validity where the khutors and otrubs investigated by the G.U.Z.i.Z. were concerned. Certainly on the khutors the cattle population, and of importance for the future, the number of calves, increased; so too did the number of poultry and pigs. There was meanwhile no decline in the size of the horse and sheep populations. The changes on the otrubs were less marked than on the khutors, although the overall trend was in the same direction:

Table 58
Livestock Before and After Enclosure in Rzhevskiy Uyezd (3)

Livestock:	Type of Farm			
	Otrubs		Khutors	
	Before enclosure	After enclosure	Before enclosure	After enclosure
Head per farm				
Horses	1.4	1.3	1.8	2.0
Cows	1.4	1.4	1.9	2.0
Calves	0.6	0.7	0.6	1.1
Sheep and Goats	1.8	1.3	1.9	1.9
Pigs	0.7	0.9	0.8	1.1
Poultry	7.0	7.0	9.1	11.9
Value of livestock (in rubles)	210.6	214.0	271.5	333.1

For the purposes of comparing the situation on the enclosed and non-enclosed farms it is best to use data contained in the 1912 household census. As Table 59 overleaf shows, the number of horses kept on all types of enclosed farm exceeded that on the non-enclosed, but the numbers of cattle and pigs were much the same.

The enclosed farms were clearly better stocked than were farms in the commune. This, however, was in all probability more a reflection of the fact that the former were drawn from the more prosperous classes in the village than an indication that they had expanded the number of livestock they owned after enclosure. Indeed, the evidence would seem to point to the reverse having happened. Examination of Table 60 overleaf shows that in many cases the number of cows and horses on otrubs and khutors with more than 4 desyatinas of sown land was actually lower than on farms of equivalent size in the commune. This would tend to

Table 59

Livestock on Enclosed and Non-Enclosed Farms in Rzhevskiy
Uyezd, 1912 (1)

Type of Farm	Head of livestock per farm:		
	Horses	Cows	Large livestock
Non-enclosed	1.1	1.4	3.5
Otrubs	1.4	1.4	3.7
Khutors	1.6	1.5	3.9

Table 60

Livestock on Enclosed and Non-Enclosed Farms by Size in
Rzhevskiy Uyezd, 1912

Size of farm (in desyatinas of sown land)	Non-enclosed		Otrubs		Khutors	
	Horses	Cows	Horses	Cows	Horses	Cows
0.0 - 0.01	0.0	0.2	0.1	0.2	0.1	0.4
0.01 - 1.0	0.5	0.7	0.7	0.8	1.0	1.0
1.01 - 2.0	0.9	1.0	1.0	1.0	0.9	1.0
2.01 - 3.0	1.1	1.3	1.1	1.1	1.2	1.1
3.01 - 4.0	0.9	1.6	1.4	1.4	1.7	1.7
4.01 - 5.0	1.5	1.9	1.6	1.6	1.9	1.7
5.01 - 6.0	1.8	2.2	1.7	1.8	2.0	1.8
6.01 - 7.0	2.0	2.4	1.8	1.9	1.9	1.7
>7.01	2.5	2.9	2.6	2.5	2.4	2.2
Total	1.1	1.4	1.4	1.4	1.6	1.5

suggest that some at least had had to sell off a number of their stock after enclosure. This contradicts the findings of the Government investigation, but presumably the explanation lies in the bias in the sample of the latter.

VI - 2d. Farm Implements and Machinery

Unfortunately the only information contained in the 1912 household census about farm implements relates to the ownership of ploughs, but this is sufficient to show that the enclosed farms were, at least in this respect, rather better equipped than the non-enclosed farms. Whereas in 1912, 82% of farms in the commune had a plough, 86.4% of the otrubs and 85.4% of the khutors were in the same year similarly equipped.

Among the enclosed farms investigated by the G.U.Z.i.Z. there was an increase in the number of farm implements owned during the years following enclosure. Particularly important to note is the increase in the number of enclosed farms on which modern agricultural machinery was found. (see Table 61 overleaf). The use of iron harrows, iron ploughs, seed drills, harvesting, mowing, winnowing, threshing and seed-sorting machines could substantially increase the productivity of the land through either working the soil more effectively or avoiding waste. Ownership of the more sophisticated machines, however, remained limited.

VI - 2e. The Use of Fertilisers

According to the G.U.Z.i.Z. investigation, the number of farms on which manure was used to fertilise the fields declined by nearly one third after enclosure but this decline was offset by the increase in the use of artificial fertilisers. (see Table 62 overleaf). How representative this was of the situation on all the enclosed farms in Rzhevskiy uyezd it is impossible to determine, but it is likely that on many there was a reduction in the amount of manure applied to the land. As shown in the table overleaf, the head of livestock relative to sown land was lower on the enclosed than on the non-enclosed farms, which would imply that the amount of manure available per desyatina was correspondingly lower. As by the twentieth century, peasant land in Tver Province as a whole was receiving only half its actual requirement of organic manure, it seems likely that land on many enclosed farms was

Table 61

Agricultural Implements and Machinery on Farms in Rzhevskiy
Uyezd Before and After Enclosure (1)

Farm implements	Number of Implements per 100 households		% Number of households with modern machinery	
	before enclosure	after enclosure	before enclosure	after enclosure
Wooden plough	7.0	3.0		
Modern iron plough	146.0	167.0		
Wooden harrow	1.0	0.5		
Wooden harrow with iron teeth	166.0	172.0		
Iron harrow	5.6	17.6	4.0	13.1
Seed drill	0.0	0.2	0.0	0.2
Harvester and mower	0.2	1.1	0.2	1.1
Winnowing and seed sorting machine	25.3	42.2	25.3	42.0
Threshing machine	0.8	2.7	0.8	2.6

Table 62

Fertilisers and Head of Livestock to Sown Area on Enclosed
and Non-Enclosed Farms in Rzhevskiy Uyezd

a. % number enclosed farms using:	Before enclosure	After enclosure
Manure	79.6	55.0
Artificial fertilisers	0.7	24.7
Not using any fertiliser (3)	0.7	1.3
b. Number desyatinas of sown land per 1 head of large livestock on:		
Otrubs	0.8	
Khutors	0.8	
non-enclosed farms (1)	0.7	

under-fertilised in Rzhevskiy uyezd. One advantage common to all the enclosed farms, however, was that since their land was consolidated and easily accessible it was probable that all fields were at some time fertilised. This is in contrast to the situation in the commune where the more distant inaccessible land parcels never received any manure.

VI - 3. The System of Farming on the Enclosed and Non-Enclosed Farms Compared

It is evident from the information presented above that the enclosed farms were different from the non-enclosed in many respects: the enclosed farms had a larger area of their land under arable than did the non-enclosed, their pattern of crop production was more diversified, a larger percentage had introduced ley grass cultivation on to the land and they were better stocked with livestock and farm machinery. None of this proves, however, that they were more 'progressive' than their neighbours in the sense that they had adopted a higher system of farming. What it does prove is that those trends which by the beginning of the twentieth century had begun to develop in the communes of Rzhevskiy uyezd were more pronounced on the enclosed farms.

The information concerning the various aspects of farming on the enclosed farms has obviously to be interpreted with care. It could, for example, be assumed that simply because a greater share of their land was under ley grasses, more of the enclosed farms had abandoned the three-field system and adopted multiple-field rotations than the non-enclosed. But such an assumption could well be false for, as described in Chapter II, ley grass cultivation was adopted in many communes without there being any change in the rotation practised and there is nothing to say that this was not also the case with enclosed farms. Similarly, the reduction on farms of the area of natural sources of livestock fodder, which was considered by the proponents of the Stolypin Reform to be a 'progressive' trend, must only be accepted as such if it can be proved that it was accompanied by a change in the system of arable cultivation; if not, then the consequences for farm productivity in the future could be unfavourable in the extreme.

Direct evidence relating to the system of farming practised on the enclosed farms is available only for the khutors and otrubs investigated by the G.U.Z.i.Z. According to the investigation, enclosure was in fact accompanied by a gradual transition to four and multiple-

field rotations on nearly all the farms investigated. Whereas before enclosure the three-field rotation was practised on over 80% of the farms, by 1913 it had been abandoned on all but a small minority (Table 63). By 1913, the majority of farms were in a transitional stage between three and multiple-field rotations.

Table 63

Crop Rotations on Enclosed Farms in Rzhevskiy Uyezd, 1913 (3)

Rotation	% number of farms on which rotation used	
	before enclosure	after enclosure
Three-field	85.5	16.1
Transitional to ley grass rotation	11.4	29.2
Transitional to multiple- field rotation	0.7	45.5
Established multiple-field	4.4	9.2

One peasant, A. Solovev, described the stages by which the transition was made in an article in a local agricultural journal: "In the early spring an agricultural advisor came to my otrub and told me to divide it into eight parts. All the land already ploughed was split into four fields; the first was left under fallow; the second planted with oats; the third, potatoes and the fourth, flax" Solovev went on to explain how he planned in the following year to add one field of rye to the rotation and then, during the course of the next three years, three fields of clover "to end up in 1917 with a correct eight-field rotation" (7).

While the evidence of the G.U.Z.i.Z. investigation must be accepted as sound, it must be remembered that the sample of farms was undoubtedly a biased one. Reports of the zemstvo agricultural committee tend to suggest that the adoption of multiple-field rotations was not as widespread on the enclosed farms as the Government would have liked people to believe. The first agricultural conference of the Tver Province zemstvo held in 1910 noted, for example, that "a considerable

number" of the enclosed farms had continued to use the three-field system of rotation. Many of the peasants who had begun to make the transition to a new system, it went on to report, had been forced to abandon the experiment, "..... moving on to khutors and otrubs the peasants, used to the communal form of organisation are not in the position to orientate themselves to the new conditions in farming so, in the absence of any advice and favourable credit terms, they return to the traditional three-field system and very rapidly are ruined" (8).

Judging from the percentage of the arable recorded under ley grasses in the 1912 household census, it certainly seems that four or multiple-field rotations could have been properly established on few of the enclosed farms in Rzhevskiy uyezd; under the four-field rotation the area of land under ley grasses would be approximately 25% of the total, while under more complex rotations it would rise to one-third or more. On the otrubs in the uyezd, ley grasses occupied under 10% of the total, and on the khutors under 15%. On the other hand, the figures in the 1912 census do indicate that the three-field rotation had been forced into a decline on the enclosed farms. Had the three-field rotation still been operating in its 'pure' form, the arable would have been recorded as being equally divided into three parts - winter crops, spring crops and fallow. This pattern had already been modified on the farms in the commune, and on the enclosed farms the departure from the norm was even more pronounced (Table 56). It would be wrong, however, to try to determine on this basis the actual type of rotation practised in most enclosed farms. All that can be concluded is that while the evidence would tend to suggest that correct ley grass rotations had as yet been established on only a few enclosed farms, the three-field rotation was less dominant than on farms in the commune.

The reason for the introduction of ley grasses on to the peasants' land in Tver Province was that its production would provide a solid foundation for the expansion of commercial livestock husbandry, particularly dairying, and as noted in Chapter II, there were signs that this was already developing, albeit slowly, in the commune (p. 92). The desire to expand their dairy herds was also probably the reason why peasants on the enclosed farms in the Province began to sow part of their land to clover and grass, but the evidence would suggest that, for the present, their livestock farming economy remained at a most primitive level of development and that arable farming continued, as in the past,

to be their dominant activity.

A dairying interest in farming was indicated when the number of cattle on peasant farms exceeded the number of horses. This was the situation on peasant farms in the commune in Rzhevskiy uyezd but not on the enclosed farms. According to the returns of the 1912 household census, the number of cows was the same or lower per farm on khutors and otrubs in the uyezd than horses, and this was true of nearly all size groups (Table 60). Clearly Kofod's claim that after enclosure the peasants would sell their sheep in order to augment their dairy herds was not supported by the situation in Rzhevskiy uyezd: the number of sheep on the enclosed farms was limited, but that of cows not noticeably great. Whatever the legislators might say to the contrary, the movement of peasants on to enclosed farms, even in a province such as Tver where ley grass cultivation was well developed compared with the rest of the Empire was evidently accompanied by difficulties in the sphere of livestock husbandry. During the years immediately following enclosure, the peasants had to attempt to find solutions to the problem of providing fodder for their livestock and not all were successful.

The principal problem for peasants on the enclosed farms was how to provide sufficient grazing land for their livestock during the five and one half months of summer. Although it did not apply to all, many of the enclosed farmers emerged after enclosure with no permanent pasture for their livestock and access to the former common land was not always granted. Also, as a result of the changes in the type of rotation practised on the land, many found that the area of fallow available for grazing was limited. Table 64 below shows that the area of both fallow and pasture relative to the head of livestock was much lower on the enclosed than on the non-enclosed in Rzhevskiy uyezd.

Table 64
Area of Natural and Cultivated Grasslands to Number of Livestock
in Rzhevskiy Uyezd

Per one head large livestock desyatinas of:			
Type of farm	Pasture (3)	Hayland (1)	Cultivated ley-grass land (1)
Non-enclosed	0.4	1.5	0.08
Otrubs)	0.1 - 0.13	1.4	0.13
Khutors)		1.7	0.20

The way round the problem, according to the authorities (9), was for the peasant farmer to feed his livestock all the year round mainly on hay, which in Rzhevskiy uyezd would require that at least 180 puds of hay were produced per head of livestock (10). As things stood in 1912, however, this was not possible on the majority of enclosed farms. On the otrubs, the area of natural hayland per head of livestock was lower than on the non-enclosed and, as yet, insufficient grass was cultivated to offset this shortage. The situation on the khutors was somewhat better for, with their larger area of both natural and cultivated grassland, they were able to produce nearly sufficient hay to feed their livestock in their present numbers for most months of the year. There could, however, at this stage be little thought of expanding herds. Of the enclosed farms investigated by G.U.Z.i.Z. which must have been among the most progressive in the uyezd it is interesting that the majority still continued in 1913 to pasture their livestock freely on permanent pasture. The others meanwhile, were forced to tether their livestock on the pasture or keep them in paddocks. Only 1.2% had gone over to stall feeding all the year round as was recommended:

Table 65
Summer Feeding of Livestock on Enclosed Farms in Rzhevskiy
Uyezd, 1913 (3)

% number of farms on which livestock maintained in summer:

freely	On pasture:			in stalls
	of which	tethered	in paddocks	
44.4	28.1	26.2	1.2	

The enclosed farms had to grapple with two problems simultaneously where livestock were concerned. First, if they wanted to intensify their system of farming, and the evidence is that the majority did, they had to face the immediate consequences of a reduction in the area of fallow but, secondly, as a result of enclosure, they had at the same time to face the consequences of the loss of common grazing rights

on the land of the commune. For the enclosed farms, the transition to intensive field rotations must therefore have been more hazardous than for farms in the commune because the latter were able during the period of transition at least to fall back on the traditional methods of feeding their livestock.

The experience of A. Solovev on his otrub is a case in point. The transition to an eight-field rotation on Solovev's otrub was to take a period of five years and during the first two no clover was sown at all and the share of fallow reduced to under one quarter of the arable area. A single clover field was added in the third year after enclosure and two more in the following years (p.218). Meanwhile the commune had withdrawn from Solovev the right to use the communal pastureland, and the natural hayland on his otrub was poor scrub which yielded insufficient to feed his livestock through the winter months. Solovev was forced to purchase part of the fodder for his livestock and current prices were high (11).

Where livestock husbandry was concerned, the enclosed farms as they were in 1912/1913 were obviously no more advanced than were the farms in the commune. On the other hand, it must be acknowledged that their potential for development was greater. If they could survive the first difficult years after enclosure and the transitional stages to intensification, the peasants on the enclosed farms in Rzhevskiy uyezd had great possibilities for developing on their farms a system of mixed farming with emphasis on flax cultivation on the arable. "The movement on to khutors" Pershin commented on the situation in Tver Province, "became the territorial base for the growth of commercial flax producers, who increased their sowing of flax and fodder grasses and at the same time expanded their dairy herds" (12). The evidence that exists suggests that in 1912/1913, while far from having completed their development, a relatively large number of enclosed farms in Rzhevskiy uyezd were moving in the direction of the greater intensification of farming.

VI - 4. The Productivity of the Land on the Enclosed Farms

Unfortunately, the only information available about the productivity of the land on enclosed farms in Rzhevskiy uyezd is of yields of the principal crops on the khutors and otrubs investigated by the G.U.Z.i.Z. The performance of this particular sample of enclosed

farms was impressive, yields in 1912 and 1913 for all crops exceeding those on peasant farms in the commune. The yields of rye, oats and barley in 1913 were also higher on the enclosed farms than on the estates of the landed nobility (Table 66). The higher productivity of the enclosed farms can be attributed in part to the changes made in rotations but probably a more important factor was that a relatively large number of the farms involved had begun to use artificial fertilisers. Some had the advantage of the use of modern agricultural machinery.

Table 66

Yields on the Enclosed and Non-Enclosed Farms and on the Estates of the Landed Nobility in 1912 and 1913 (3)

Type of Farm	Year	Yields in puds per desyatina for:			
		Rye	Oats	Barley	Potatoes
Non-enclosed	1912	51.6	54.0	39.0	400.0
	1913	40.0	50.0	35.0	400.0
Enclosed	1912	61.8	54.9	54.2	529.4
	1913	66.3	60.0	55.4	477.7
Nobles' estates	1912	66.0	59.4	27.6	580.0
	1913	60.0	60.0	25.0	700.0

VI - 5. Involvement of Peasants on the Enclosed Farms in Off-Farm Employment

In the absence of alternative sources of information, perhaps the most satisfactory indication of how successful enclosed farms were economically is the degree to which they were forced to rely on the earning from employment off the farm for part of their income. Care must be taken to avoid reading too much into the figures available. It was quite possible for a household to be recorded in the census as being involved in off-farm employment, in that one of its members worked in a factory for part of the year, but this did not necessarily mean that it was dependent on the money thus earned for its economic solvency;

indeed, there is no way of telling whether the peasants who went away to work made any contribution to the family budget. It is, nevertheless interesting to examine the ways in which the enclosed farms differed from the non-enclosed in respect of their involvement in off-farm employment.

As the data presented in Table 67 overleaf show, the enclosed farms as a group evidently had less need to supplement their farm income from other sources than did the farms in the commune. Nevertheless, the number that had to depend upon supplementary income was fairly large - over 50% of the otrubs and over 40% of the khutors. It would appear that there was a greater tendency among the peasants on the enclosed than the non-enclosed farms to find employment locally and to be employed for short periods of time, which would suggest that the labour of many of them was still in demand on the farms; indeed, the percentage of peasants engaged locally in off-farm work who were at the same time fully employed in farming was high. Where these particular peasants were concerned, the employment in off-farm work should probably be viewed as a temporary stop-gap measure, necessary until farming began to yield high returns - this was the case where the peasant Solovev was concerned. With no relatives to help him, Solovev had to combine work on his otrub with temporary labour as a carpenter in a nearby village - "in order to earn some money" (13).

The position of peasants who were employed away from their immediate locality in industry was different; a large number of those coming from khutors and otrubs were involved in such employment for long periods of time, six months or more, and by 1912 had completely severed their ties with farming. It is possible that enclosure reduced the labour requirements on some farms so that peasants who previously had been forced to return home at the busy time of the year could now remain away permanently.

Insofar as it is possible to make judgements about the economy of farms from the degree to which they were involved in off-farm employment, it would seem that the enclosed farms as a group were more successful than the non-enclosed and that the most successful group of all were the khutors. This fits in well with the information presented in the sections above. Evidently, however, as Table 68 overleaf shows,

Table 67

Involvement in Off-Farm Employment - Enclosed and Non-Enclosed
Farms in Rzhevskiy Uyezd, 1912 (1)

	non-enclosed	otrubs	khutors
% number households involved in off-farm employment	68.1	51.3	44.6
A. employed locally			
1. % number households involved	37.2	35.9	23.7
% number of those employed who worked for:			
2. 1-6 months p.a.	54.4	55.2	57.4
3. 7-12 months p.a.	52.4	44.7	42.6
% number of those employed in off-farm work who:			
4. Completely severed ties with farming	40.7	31.3	40.3
5. Partially severed ties	12.3	10.1	-
6. Continued to farm full-time	47.0	58.7	59.7
B. employed outside own uyezd			
1. % number households involved	37.4	29.5	23.3
% number of those employed worked for:			
2. 1-6 months p.a.	26.9	14.9	31.0
3. 7-12 months p.a.	73.1	85.1	69.0
% number of those employed in off-farm work who:			
4. Completely severed ties with farming	69.6	78.9	75.6
5. Partially severed ties	20.5	12.2	2.7
6. Continued to farm full-time	9.9	8.7	21.6

the percentage of enclosed farms involved in off-farm employment varied according to their size and it would appear that the larger the khutor or otrub the more sound was its farming economy.

Table 68

Involvement in Off-Farm Employment by Size of Farm: Enclosed and Non-Enclosed, 1912 (1)

Size of farm by sown area in desyatinas	% number of farms involved in off-farm employment		
	Non-enclosed	otrubs	khutors
0.0 - 0.01	75.3	57.5	57.1
0.01 - 2.0	64.2	62.9	67.8
2.01 - 3.0	73.1	58.2	42.4
3.01 - 4.0	68.0	64.6	45.0
4.01 - 5.0	60.1	58.3	46.6
5.01 - 6.0	60.7	59.0	45.4
6.01 - 7.0	58.9	47.7	30.0
>7.01	47.6	31.3	17.2
Total	68.1	51.3	44.6

VI - 6. State Agricultural Aid Programmes for Peasant Farms in Tver Province

Perhaps the greatest obstacle in the way of agricultural progress on enclosed and non-enclosed farms alike in Russia was that the peasants simply were not aware of what improvements were necessary on their farms or how improvements should be introduced. In order to familiarise the peasants with the latest developments in agricultural science, many zemstvos in provinces throughout the country began to establish agricultural advisory services from the latter decades of the nineteenth century onwards. The function of the advisory service was two-fold: first, it was charged with the task of explaining the new methods to the peasants and, second, it had to help in their introduction in the field through the agency of centres for livestock breeding,

seed-shorting, machinery hire and purchase and the distribution of fertilisers. After the passing of the Stolypin Reform, new bodies were set up or incorporated into the zemstvos which had the task of carrying out the same sort of work exclusively among the enclosed farms. In addition, there were private organisations such as the Imperial Moscow Agricultural Society with branches in different provinces of Russia, which of their own accord pursued agricultural aid programmes and there were also local societies or even landowners performing the same function. It was possible, therefore, for a province to have a number of different agencies financed either by the central Government, the local authorities or private individuals all of which proffered aid to the peasants in one form or another.

In Tver Province there was this multiplicity of organisations - the zemstvo agricultural office (established in 1869, one of the first in the Empire), two large agricultural societies founded by local noblemen (1886), a filial of the Imperial Moscow Agricultural Society (1889) and the agricultural departments of the local Land Settlement Committees (1909). The peasants in the Province could draw on the services of these agencies and it could perhaps be said that agricultural aid was more widespread and effective in Tver than in many other provinces of the Empire. Nevertheless, by 1917, only a relatively small section of the population in Tver had benefited from the various services, a situation which was attributable in part to lack of resources on the part of the organisations concerned and in part to poor management.

The history of the zemstvo agricultural office was certainly chequered. During the 1870's and 1880's it concentrated on extending credit to the peasants for the purchase of grain and land and, in 1870, it embarked on a programme of marsh reclamation to help relieve land-shortage. These early activities were not marked by any great measure of success. In 1890, therefore, there was a change in policy and henceforth the zemstvo decided to strike at the causes of peasant poverty rather than attempting merely to alleviate the symptoms. In 1899, a qualified agronomist was appointed to advise the peasants on new techniques in farming and, starting at approximately the same time, the zemstvo began to distribute improved seed among the peasants, to set up experimental orchards and carry out a detailed investigation of the

state and requirements of livestock husbandry (14). More importantly, in the 1890's the first machinery warehouses were established in the Province from which the peasants could purchase modern agricultural machinery on favourable credit terms. Between 1890 and 1900, warehouses were introduced into all the uyezds of Tver and in 1893 a master was employed to manufacture machinery in the Province itself to supply the warehouses. In addition to those of the zemstvo, there were a number of warehouses set up in the 1890's by various private bodies. However, the efforts to encourage the use of modern agricultural machinery among the peasants met with only limited success (15). Another shift in policy therefore took place in the zemstvo agricultural office in the first years of the twentieth century which involved a considerable broadening of its spheres of activity. By the year 1910, when the first zemstvo agricultural conference took place, a detailed programme of agricultural aid had been formulated, the primary task of which was to help bring about a complete change in the system of farming practised on the peasants' farms (16).

In accordance with the general aims laid down in 1910, the zemstvo began to establish on peasants' land in Tver Province demonstration fields and farms illustrating the use of new methods and techniques. At the same time, machinery hire depots, livestock breeding stations and mobile seed sorting depots were set up and credit facilities for the peasants extended. From 1910, 'propaganda' work was much increased in the Province with farm advisors taking responsibility for educating the peasants in the use of new techniques by giving public lectures in the villages and distributing leaflets. As a result of the much expanded programme, the expenditure of the zemstvo agricultural office rose from 1800 rubles in 1909 to 212,000 rubles in 1912 (17). But few of the plans were fulfilled. Although the zemstvo was committed to increasing its propaganda work among the peasants, it was reported in 1912 that "the zemstvo agricultural officials have completely disappeared out of sight they do everything like office clerks. The farm advisors sit in their offices up to their eyes in all sorts of official documents - so that they have become 'paper-pushers' the farm advisors should put their thoughts not on paper but on the land itself, so that every illiterate muzhik and poor granny would be able to read with his or her own eyes the lessons of the work" (18). As early as 1902, the Kashinskiy uyezd zemstvo had noted that much of the

agricultural office's work was wasted in the production of books and pamphlets for which there was no demand because most peasants were illiterate (19).

The catalogue of failures of the zemstvo agricultural office is long. By 1914 a number of demonstration fields had been established in peasant communes but their success was limited and no demonstration farms had been set up. Poor research into the needs of the peasants sometimes led to the machinery depots stocking the wrong sort of machinery and multiple-field rotations were introduced prematurely and had to be abandoned. The latter prompted the seventh zemstvo agricultural conference in 1913 to approve a resolution to the effect that "..... considering all the existing difficulties associated with the introduction of multiple-field rotations, it is necessary to proceed with the utmost caution and only introduce them where there are no special obstacles encountered" (20).

One of the constraints on the activity of the zemstvo was lack of capital, despite the expanded budget, to carry through projects to the end. Thus in 1912 the zemstvo decided to set up fifty livestock breeding stations, but in 1914 there were still only eleven in the whole Province; similarly, by 1914 there should have been fifty one machinery hire depots but there were only thirty six. From their point of view, the peasants were often unable to take full advantage of the credit facilities since, in order to qualify, they had to provide one-fifth of the price of the facility they were hoping to purchase. In the case of some of the more up-to-date machinery, for example, this proved to be very expensive.

Until 1909 the task of rendering agricultural assistance to the enclosed farms in Tver Province was the responsibility of the zemstvo agricultural office. In that year a new organisation was set up within the Tver Land Settlement Committee and its branches in the uyezds which, financed from the central budget, had sole responsibility for the enclosed farms. Henceforth the enclosed farms were entitled to continue to use the facilities of the zemstvo, such as the machinery hire depots and livestock breeding stations, but insofar as advice to farmers, the distribution of improved seeds, the establishment of demonstration fields and farms and credit and grants were concerned, the Land Settlement Committee's agricultural section operated separately from the beginning. By the outbreak of the war, therefore, there were two parallel organisations in most uyezds, both carrying out essentially

the same functions. The Land Settlement Committee, however, had one important advantage over the zemstvo, namely that it had far fewer farms to supervise, only 8.2% of the total in the Province, and the resources at its disposal were much greater. Between 1909 and 1913, the Land Settlement Committee's total expenditure on agricultural improvement programmes was 390,000 rubles and over the same period that of the zemstvo, dealing with ten times as many farms, was only 255,300 rubles (21). The situation did not go unchallenged and after 1909 the provincial Land Settlement Committee received many requests from uyezd zemstvo agricultural offices requesting the merger of the two organisations (22). Opposition to the preferential treatment accorded to the enclosed farms was registered in the withdrawal from some zemstvo of machinery hire facilities to the enclosed farms. Where this happened, the Land Settlement Committees had to establish their own depots, "..... in some uyezds", it was reported, "the zemstvo machinery hire depots do not serve the khutor and otrub farmers we, therefore, should open our own" (23).

Despite its seemingly large budget, the Tver Land Settlement Committee provided agricultural assistance for only a minority of the enclosed farms. The 1914 report of the Committee revealed that the agricultural section suffered from a shortage of trained personnel and capital (24). In 1914 the Committee employed ten Chief Agronomists who were based on the provincial and uyezd towns and thirty seven farm advisors who lived in the villages. According to the Committees, each Chief agronomist should have had responsibility for no more than 1,500 farms but in 1914 the average number pertaining to each was 2,650 (25). Despite this apparent shortage of personnel, no less than 10.4% of the total expenditure of the agricultural section went towards paying salaries. (see Table 69 overleaf).

During the four years of their existence, the agricultural sections of the Land Settlement Committee in Tver concentrated upon the task of assisting peasants on the enclosed farms in the purchase of agricultural machinery, improved seeds and fertilisers. It was admitted, however, that loans for this purpose were too low, under 5 rubles per household, and that there were too few depots in the Province to satisfy demand. Similarly, there were acknowledged to be too few seed-sorting depots. Little work had been done meanwhile at the field level in setting up demonstration fields and farms showing how to grow clover, root crops and flax in rotation and to improve methods of working the

soil and sowing. By the end of 1914, it was projected that there would be a thousand demonstration fields on enclosed farms in the Province, but at the beginning of the year there were still only eighteen. Finally, it was noted that the chief agronomists had not yet begun to focus their attention on the development of market gardening or on the improvement of livestock husbandry, so achievements in this direction were nil (26).

Table 69

Expenditure of the Tver Land Settlement Committee's
Agricultural Section, 1909 - 1913 *

Service	% of all expenditure
Salaries for personnel	30.4
Credit for machinery purchase	34.5
Setting up of machinery hire stations	11.3
Lectures and publications	7.8
Livestock breeding stations	7.4
To set up demonstration farms	2.6
Others	5.0

* Doklad zaveduyushchogo Agronomicheskogo (1915) op.cit.

Despite their problems, the agricultural sections of the Land Settlement Committees did succeed in reaching out to some of the enclosed farms in Tver Province. They were in one respect very fortunate in that, since the enclosed farms tended to occur in spatial clusters, they could concentrate the resources they had into relatively small areas so they would have maximum impact on all aspects of farming (Figure 32 of Rzhevskiy uyezd). What part these sections played in the improvements that were introduced on to the enclosed farms it is difficult to judge but there can be little doubt that the enclosed farms, in respect of the access they had to new ideas in farming, were in an advantageous position compared with the non-enclosed. Certainly, in

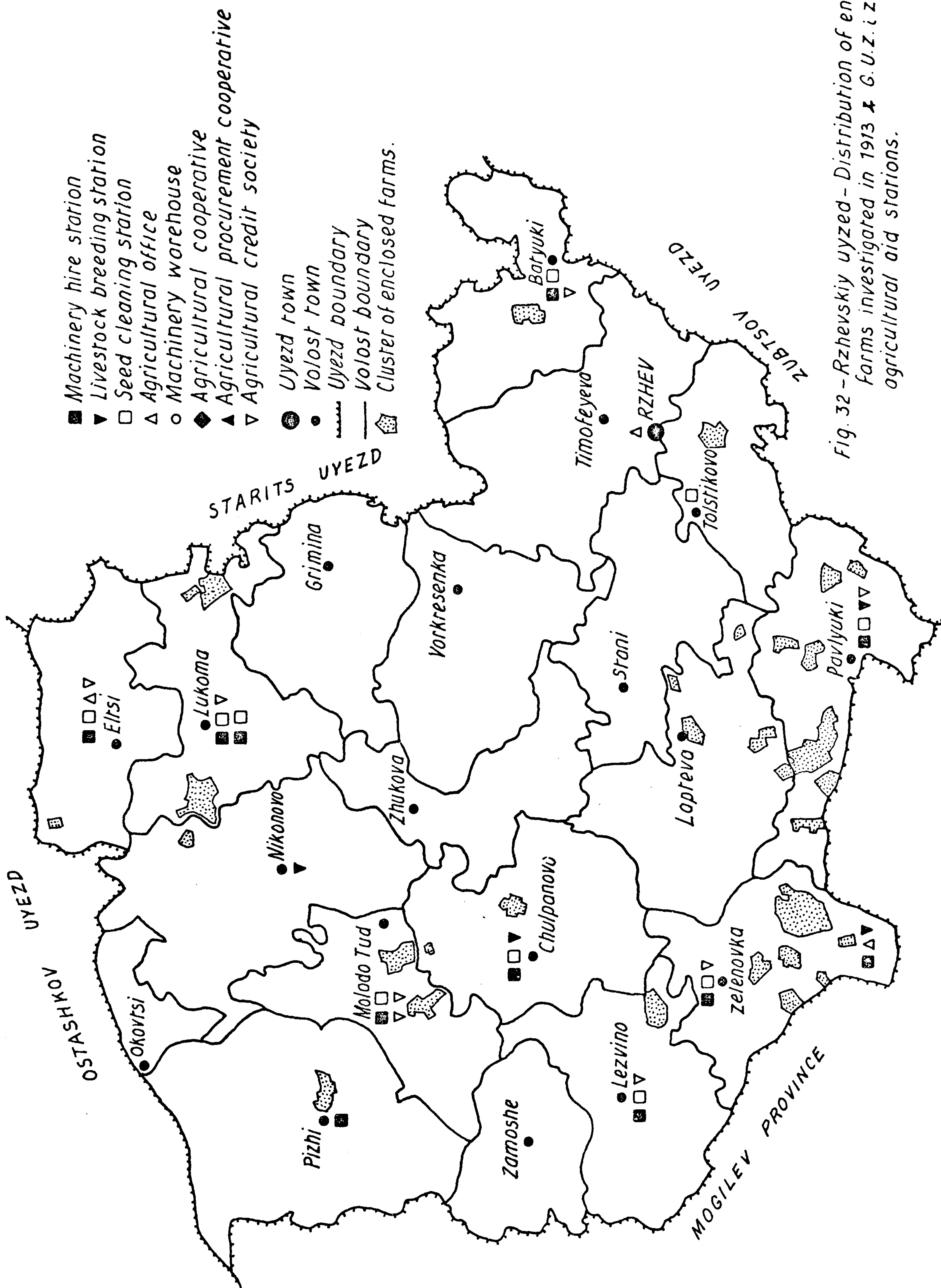


Fig. 32 - Rzhevskiy uyezd - Distribution of enclosed farms investigated in 1913 & G.U.Z.i.Z agricultural aid stations.

discussing the reasons for differences in the standard of farming on various types of farms in Tver, it must not be forgotten that the enclosed farms were given preferential treatment by the authorities and this cannot be discounted as a factor in their relatively greater progress.

NOTES TO CHAPTER VI

1. Zalivalov, I., Iz Zhizni Derevni; In Sel'skokhozyaystvennyy Listok, Tver, June 1914, No. 10.
2. Sbornik Materialov dlya Otsenki Zemel' v Tverskoy Gubernii, Volume 3, Rzhevskiy Uyezd. Svendeniya o Krest'yanskom Khozyaystve, Tver, 1917.
3. Zemleustroyennyye Khozyaystva, op.cit.
4. The extension of the arable could, of course, only be considered a positive development if it took place in conjunction with a change in the rotation practised; if not then it would simply make worse the imbalance already existing between arable and non-arable land which was the cause of declining soil fertility. The authorities considered, however, that an improvement in field rotations would inevitably accompany enclosure.
5. The source of information for this paragraph is Kofod (1907), op.cit., Chapter III.
6. Kofod (1907), op.cit., Chapter IV.
7. Solovev, 1914, op.cit., p.206 - 207.
8. Trudy Pervogo Agronomicheskogo Soveshchaniya pri Gubernskoy Uprave, Tverskoye Gubernskoye Zemstvo. Tver, 1910, p.74.

9. Kofod (1907), op.cit., Chapter IV.
10. This figure taken from Ekonomicheskoye Opisaniye Zemledel' cheskikh Rayonov Rossii, 1900, op.cit., p.194.
11. Solovev, (1914), op.cit., p.205.
12. Pershin, P.N., Agrarnaya Revolyutsiya v Rossii, Kniga 1. Moscow, 1966, p.75.
13. Solovev, (1914), op.cit., p.208.
14. The early history of the zemstvo and other agricultural organisations is taken from Trudy S''ezda Deyateley Agronomicheskoy Pomoshchi Mestnomu Khozyaystvu, Imperatorskoye Moscovskoye Obshchestvo Sel'skogo Khozyaystva. Moscow, 1901.
15. Ibid., p.220.
16. Trudy Pervogo Agronomicheskogo Soveshchaniya, 1910, op.cit., p.74. The work to be done was listed in the following order of priority:
 1. Introduction of grass-cultivation in correct rotations.
 2. Introduction of new crops which would enrich the soil.
 3. Introduction of the use of artificial fertilisers.
 4. Introduction of more rational methods of working the soil and sowing the land.
 5. Further dissemination of the use of modern agricultural implements and hybridised seeds.
 6. Improvement of the method of flax cultivation.
 7. Improvement of natural pastureland.
 8. Improvement in the quality of livestock and in the method of rearing.
 9. Development of dairy farming.
 10. Development of market gardening.

17. Figures quoted from Koltinin, N.C., Ocherk Meropriyatii po Agronomicheskoy Pomoshchi Naseleniyu v Tverskoy Gubernii; In Sel'skokhozyaystvennyy Listok, Tver, December, 1912.
18. "Chto takoye Agronomicheskaya Pomoshch'?" In Sel'skokhozyaystvennyy Listok, Tver, December, 1912.
19. Trudy Mestnykh Komitetov Tom XLII, p.300.
20. Trudy VII-ogo Agronomicheskogo Soveshchaniya pri Gubernskoy Uprave, Tverskoy Gubernskoye Zemstvo. Tver, 1913, p.19.
Doklad Agronoma B.S. Kiseleva.
21. Figures quoted from; Doklad Zaveduyushchogo Agronomicheskoy Pomoshchi v Rayonakh Zemleustroystva Osobomu Agronomicheskomu Soveshchaniyu v 1914, Tver, 1915.
22. Ibid, p.15.
23. Ibid, p.17.
24. Ibid, p.3.
25. Ibid, calculation made from figures presented in the report.
26. Ibid, p.p. 17 - 25.

CHAPTER VII

ENCLOSURE AND AGRICULTURAL PROGRESS - THE CASE OF TULA PROVINCE

The problems confronting peasant farmers in Tula Province at the beginning of the twentieth century were considerable. Population densities in the Province were among the highest in all European Russia and the size of peasant land holdings the smallest, the arable had been extended to its furthest possible limits, livestock numbers were low relative to the sown area and organic fertilisers were in short supply. Despite the favourable natural environment - good soils and hot, but not too arid, climate - the productivity of peasant farming in Tula was therefore low and well below that in most other provinces of European Russia. Moreover, in contrast with Tver, the trend towards intensification and modernisation had barely begun to develop so that the standard of peasant farming remained primitive in virtually all communes. With justification the Province was included by contemporary observers among those which had made the least progress in farming since the feudal era (p.p.93-6.)

Enclosure, as elsewhere in Russia, afforded peasant farmers in Tula the opportunity to change their traditional system of farming and to adopt modern practices and methods. However, given, in the words of the Witte Commission, "..... the ignorance, complete lack of understanding of the new conditions and lack of initiative" (1) of the peasant body in the Province, the likelihood of this opportunity being grasped must from the outset have been remote. Whereas the peasants in Tver were in all probability aware before they enclosed their land that there were alternative and more effective ways of farming - although they might not have had the detailed knowledge of how to implement them - it would be safe to assume that most of their counterparts in Tula did not have even this rudimentary awareness. The absence in general in the Province of a movement towards farm improvement inevitably exerted a considerable influence on the way in which farming was practised on the enclosed farms.

III - 1. The Enclosed Farms Investigated in Tula Province:
Sources of information

Two principal sources of information have been used in the analysis of the system of farming practised on enclosed farms in Tula Province - the independent survey conducted in 1912 by Mozzhukhin (2) and the G.U.Z.i.Z. investigation (3).

Mozzhukhin's survey was conducted in Bogoroditskiy uyezd, the stated purpose being "to find the fundamental types of new peasant farm and to identify the most important changes on them as a result of the change in the system of land tenure" (4). A sample of one hundred and sixty three enclosed farms, 20% of the total in the uyezd, was taken of which 21.5% were khutors and 78.5% otrubs. All but one of the khutors had been purchased by the peasants from the Peasant Land Bank and most were located near to the village of Prudy in Nepriyadvenskiy volost. The otrubs, in contrast, had been formed principally as a result of the consolidation of allotment land, either by individual or communal enclosure, and were scattered throughout the southern part of the uyezd. The year of the enclosed farms' formation varied - whereas all the khutors had been in existence for three or more years by the time of the investigation in 1913, the same was true of only 64.8% of the otrubs.

Table 70

Year of Formation of Enclosed Farms Investigated in Bogoroditskiy
Uyezd (9)

Year	% number of all farms enclosed:	
	otrubs	khutors
1908	0.8	8.6
1909	64.1	85.7
1910	10.9	5.7
1911	21.9	-
1912	2.3	-
1908 - 1912	100.0	100.0

wide range of information was gathered for each of the farms relating to population characteristics, landownership, land use, crop distribution, rotations, farming technique, equipment and livestock and yields. The data were presented in Mozzhukhin's census according to type of farm: khutors and otrubs and size of farm (0-3 desyatinas, 3-6, 6-12, 12-20 and 20+).

Inevitably there are problems in using Mozzhukhin's survey, the principal being that no indication was given of the sampling technique employed. It is therefore not possible to state whether the farms investigated were truly representative of the khutors and otrubs in Bogoroditskiy uyezd. Nevertheless, it would appear that Mozzhukhin drew farms from a wide spectrum of socio-economic groups for included in the survey were, at one extreme, farms suffering from land-shortage, without livestock and with no more than the most basic farm implements and, at the other, farms which were very favourably endowed with resources.

Also, where the actual data are concerned, there are some points of confusion; for example, peasants on many of the khutors retained land in their former commune, but it is not made clear whether such land was included in the survey of land use, crops, yields and rotations.

The G.U.Z.i.Z. investigation contains information relating to 1,509 enclosed farms in Yepifanskiy uyezd. All the farms investigated were on the land of the Peasant Land Bank, having been purchased by peasants during the period leading up to the 1st January 1911. Although they constituted a minority of the enclosed farms in the uyezd, the farms investigated represented a 100% sample of the purchased enclosed farms in existence in the uyezd for three or more growing seasons. Of the enclosed farms investigated 67.8% were otrubs with the peasant farmer remaining resident in his former village (otrub bez pereseleniya), 6.7% were otrubs with the peasant living in newly constructed hamlets (otrub s pereseleniyem) and 15.5% khutors. The information collected, which related to many aspects of farming economy, were grouped only according to type and not, as in Mozzhukhin's survey, to size of farm.

In addition to the two principal sources of information, other minor sources have been consulted which contain some useful information on enclosed farms in the Province, namely, Khryashcheva's work on peasant farm dynamics in Yepifanskiy uyezd (5) and published surveys of enclosed farms in the journal Zemleustroystvo i Zemlepol'zovaniye (6).

In order to compare the enclosed with the non-enclosed farms, data have been abstracted from the zemstvo household censuses of Bogoroditskiy and Yepifanskiy uyezds (7). Unfortunately, the data in the censuses are not grouped according to farm size so that only average totals for the different types of farm can be compared.

II - 2. The Motives for Enclosure: the Findings of Mozzhukhin's Survey in Bogoroditskiy Uyezd

Borogoditskiy uyezd was the scene of the greatest enclosure activity in Tula Province. By 1917 no less than 26.1% of all the resident households had enclosed in the uyezd, the majority through individual separation but some through communal enclosure (p.p.122/123). Mozzhukhin found that among the peasant farmers he questioned the motives for enclosure varied quite considerably, but the most significant finding was that only a minority of both those who enclosed individually and those who enclosed as a result of the decision of the communal assembly did so because they felt that enclosure would help them to improve productivity by allowing them to introduce improvements in the system of farming (Table 71 overleaf).

Where peasants who withdrew individually from their commune were concerned, the dominant motive for enclosure was to secure in their ownership the maximum possible amount of land. As the practice of repartitioning was still widespread in the majority of communes, it was often worthwhile for those peasants who stood to lose land at the next repartition, by reason for example of one of their family members dying, to enclose. Among those peasants who enclosed as a result of a community decision, the desire to hold on to their existing allotment was less important a motive for enclosure. Where these were concerned, the reason most frequently given was pressure to enclose on the part of other peasants or the Land Settlement Committee - of those questioned nearly 40% had enclosed against their wishes. Another reason given fairly frequently was that the peasant farmers concerned feared that the best land would be taken if they did not immediately agree to enclose.

All the peasants who enclosed for reasons other than to improve their farming economy, and they constituted over three quarters of the total of both individual and communal separators, obviously benefited from the advantages of holding their land in a single unit; in the

Table 71

Motives for Enclosure given by Peasants on Farms Investigated
in Bogoroditskiy Uyezd (9)

	% number of peasants giving positive answer:
INDIVIDUAL ENCLOSURE	
tive for withdrawal from commune:	
Withdrew in order to secure for himself the maximum possible amount of allotment land	51.9
Withdrew because recognised the advantages of farming on an <u>otrub</u>	22.8
. Withdrew because was forced to do so by the commune	16.5
. Withdrew in order to secure for himself good quality, well-manured, land	2.5
. Withdrew because his friends did	1.3
. Others	5.0
	<hr/> 100.0 <hr/>
. COMMUNAL ENCLOSURE	
otive for withdrawal from commune:	
. Withdrew because recognised the advantages of farming on an <u>otrub</u>	24.7
1. Withdrew in order to secure for himself the maximum possible amount of allotment land	8.7
1. Withdrew because he wanted to unite his allotment land with land purchased at an earlier date	2.5
1. Withdrew because of fear that all the best land would be taken by the others who withdrew	12.3
5. Withdrew because the majority in the commune were in favour	6.2
5. Withdrew against own wishes	39.5
7. Others	6.1
	<hr/> 100.0 <hr/>

rst instance at least, however, little could be expected from them the way of progress in agricultural methods and techniques. This s recognised by Mozzhukhin himself who, commenting on the farms rmed as a result of the peasants' desire to hold on to their existing ea of allotment, argued that such "could not be counted upon as oneers of enclosure" (8). On the other hand, Mozzhukhin found that ose who enclosed with the aim of improving their system of farming re "..... the most intelligent and energetic representatives of the asant body who long ago had recognised the need for change but had not en in a position to implement it" (9). From these peasants more could expected, but they made up under one quarter of the total.

Although, therefore, proportionately more peasants enclosed Tula than in Tver, probably fewer did so for the 'right reasons'. dging from the performance of the enclosed farms alone, it would be fe to assume that the desire to implement changes in the system of rming in Tver figured strongly in the motives for enclosure in that ovince but also, since repartitioning had fallen out of practice in st communes there, it is unlikely that fear of losing land was as minant a motive for enclosure among peasants as in Tula. The probable fference in the reasons for enclosing land must always be borne in nd when comparing the enclosed farms in the two Provinces and can help explain some of the differences that were observed in their performance.

I - 3. Aspects of Farming: the Enclosed and Non-Enclosed Farms Compared

I - 3a. Land Use

Although the low productivity of peasant farming in Tula was e primarily to the shortage of hay and pastureland in communes nsequent upon the extension of the arable during the course of the neteenth century, many of the peasants who moved on to khutors and rubs in the Province took the opportunity to put some of their maining non-arable under the plough. In Bororoditskiy uyezd the ea of arable on the enclosed farms investigated by Mozzhukhin exceeded gnificantly that on farms in the commune and the same was true of the closed farms on the land of the Peasant Land Bank in Yepifanskiy ezd (Table 72 overleaf).

Table 72

Land Use on Enclosed and Non-Enclosed Farms in Bogoroditskiy
and Yepifanskiy Uyezds

Type of farm and location	Year	% of all land in ownership under:					
		usadba	arable	hay	pasture	forest & scrub	others
Bogoroditskiy(9)							
Otrubs	1912	5.9	83.4	5.7	4.9	0.1	-
Khutors	1912	4.6	81.0	9.4	3.2	1.8	-
All enclosed farms	1912	5.4	82.7	7.0	4.3	0.6	-
Farms in communes	1911	7.0	81.6	6.0	1.5	2.8	1.1
Yepifanskiy (3)							
Otrubs	1913	90.0		6.3	3.6		0.1
Khutors and otrub-hamlets	1913	94.2		3.6	2.2		-
Farms in communes	1911	5.9	81.8	7.8	4.0	0.4	0.1

Judging from the figures presented, however, the extension of the arable after enclosure took place more at the expense of the usadba (the armyard and kitchen garden plot) than at the expense of the hay and pasture-land. On farms in the commune, the kitchen garden, which occupied up to 80% of the area of the usadba, was used for the cultivation of labour intensive crops, such as hemp, tobacco, vegetables and fruit (10). Evidently peasant farmers on the enclosed farms chose, or were forced, to dispense with this sort of production. One possible explanation is that, since they had low man/land ratios compared with other farms (p.198) and, in addition, were burdened with extra work immediately after enclosure, some of the households simply did not have the time available to cultivate the kitchen garden. Alternatively, it is possible that, even before they enclosed, many peasants had wanted to dispense with their kitchen garden but did not do so because it was the one type of land they held in hereditary ownership and to incorporate it in the arable would have meant surrendering it to the commune as a whole. But whatever the reasons, the reduction in the size of the kitchen

ardens meant that peasants on the enclosed farms had a larger area of their holding under arable and thus, in theory, could produce more money-earning grain and cash crops relative to the size of their farms than could those remaining in the commune.

While the land traditionally put under labour intensive crops was partly or wholly eliminated on the enclosed farms, that under hay and pasture seems, at least where the farms in Bogoroditskiy uyezd are concerned, to have been left untouched. On khutors and otrubs in the uyezd the share of all land in the use of the peasants under hay and pasture was greater than on farms in the commune. In Yepifanskiy uyezd, however, it was considerably lower.

In both Bogoroditskiy and Yepifanskiy yezds there was a noticeable difference in the pattern of land use on the khutors and otrubs hamlets on the one hand and the otrubs on the other. The otrubs had a greater proportion of their land under arable and a smaller proportion under natural hay and pastureland. Not surprisingly, the ratio of arable to one unit of hay and pasture was higher on the otrubs than on the khutors (Table 73) and also than on farms in the commune.

Table 73
Ratio of Hay to Arable on Enclosed and Non-Enclosed Farms
in Bogoroditskiy Uyezd, 1912 (9)

Size of farm in desyatinas)	Per one unit of hay, number desyatinas of arable on:		
	otrubs	khutors	farms in commune
0 - 3.0	-	-	-
3.01 - 6.0	23.8	-	-
6.01 - 12.0	13.1	13.01	-
12.01 - 20.0	9.9	9.4	-
>20.01	14.7	7.5	-
Total	14.5	9.1	13.6

us of all types of farm in the two uyezds, the otrubs were in the
rse position with regard to the number of livestock that could be
aintained relative to the arable under the three-field system which,
r reasons discussed elsewhere might well have influenced
eir yields. Khutors, meanwhile, were in the best position, but this
not to say that they did not suffer from shortages of hay and pasture.

It is evident from examination of Table 74 below that the
attern of land use on the enclosed farms varied according to the size
; well as type of farm:

Table 74					
<u>Land Use on Enclosed Farms in Bogoroditskiy Uyezd by Size</u>					
<u>of Farm, 1912 (9)</u>					
% of all land in ownership under:					
Type of farm and size (in desyatinas)	usadba	arable	hay	pasture	forest & scrub
OTRUBS					
0.0 - 3.0	11.7	85.5	0.4	5.1	-
3.01 - 6.0	8.5	79.4	3.3	8.8	-
6.01 - 12.0	6.1	82.4	6.3	5.2	-
12.01 - 20.0	3.5	85.9	8.7	1.9	-
>20.01	4.1	86.4	5.9	3.0	0.6
total	5.9	83.4	5.7	4.9	0.1
KHUTORS					
3.01 - 6.0	10.8	44.1	-	6.8	38.3
6.01 - 12.0	6.8	83.3	6.4	3.5	-
12.01 - 20.0	4.5	83.2	8.8	3.5	-
>20.01	3.7	82.1	11.0	2.8	0.4
total	4.6	81.0	9.4	3.2	1.6

mong the otrubs in Bogoroditskiy uyezd, the area of arable increased
long with the increase in the size of farm and that under hay, pasture
nd usadba decreased. On the khutors, the pattern was different; with
ne exception of the very smallest, the share of land under arable was
uch the same on farms of all sizes and, interestingly, it was lower than

the equivalent sized otrubs, but the share of hayland increased in relation to the increases in farm size while that of pasture and usadba decreased. Otrubs were thus potentially in a position to produce larger quantities of arable crops relative to their size than equivalent sized khutors but, as their man/land ratios were higher (p.198) and the ratio of arable to one unit of hay and pasture on all farms less favourable, the output per head as shown below (p.271), was not greater.

The differences in the pattern of land use observed on the enclosed farms can in part be put down to the diverse origins of the farms concerned. The interval of time that had elapsed between enclosure and the investigations of 1912 and 1913 was, in some cases, too short to have enabled any major redistributions of land use to have been effected. As a result, the pattern of land use on the enclosed farms often reflected not so much decisions made by the new peasant proprietors as those made by the official bodies responsible for the initial land allocation and this accounts for some of the more obvious anomalies in the pattern of land use on various enclosed farms.

It was the common practice of the Land Settlement Committee in enclosing peasant allotment land to allocate to each peasant his due share of usadba, arable and natural hayland from the village lands, even though this meant that complete consolidation might not be achieved. In addition, the Land Settlement Committee often excluded pasture and forest from the enclosure projects leaving them, as previously, in the communal use of all households. As a result, the distribution of land by use on the peasants' farms immediately after enclosure was the same as it had been in the commune and the possibilities for change were clearly limited. The policy of the Peasant Land Bank is different: the first priority of the Bank was to allocate land in single unit and this was often done regardless of its existing use; in dividing up former landowners' estates for sale, it was not unlikely that some holdings would have a disproportionately large share of land under one particular use. Bearing this basic policy difference in mind, it is easier to understand why the pattern of land use on the otrubs

Bogoroditskiy uyezd should be somewhat closer to that in the commune than was the case with the khutors, and why some khutors (those for example in the 3-6 desyatina size group) could have more than one-third of their land under wood but possess no hayland (Table 74).

In the final analysis, no appraisal can be made of the significance for farm productivity of the pattern of land use on the enclosed farms without considering the type of rotation in use. This will be discussed below (p.259).

III - 3b. The Distribution of Crops

The investigation of enclosed farms conducted by Mozzhukhin in Bogoroditskiy uyezd contains data relating to the distribution of crops on khutors and otrubs which can be compared with figures taken from the household census of non-enclosed farms in the Uyezd. As shown in table 75 below, the greater part of the arable on all farms was devoted to grain cultivation although the actual percentage both in the case of the khutors and the otrubs was somewhat lower.

Table 75

The Distribution of Crops on the Arable of Enclosed and Non-Enclosed Farms in Bogoroditskiy uyezd (9)

		% of sown area under:									
type of farm	Year	winter rye	spring oats	millet	buckwheat	spring wheat	peas	vetch	clover	potatoes	others
otrubs	1912	41.3	40.7	0.2	4.6	0.5	0.1	1.9	0.7	0.7	0.3
khutors	1912	31.7	41.0	0.4	3.8	0.7	1.1	3.8	2.5	14.8	0.3
farms in commune (2)	1911	48.5	36.4	0.7	3.0	0.6	0.1	0.7	0.0	10.0	0.04

The principal difference, however, between the two types of enclosed farms and farms in the commune was in the share of the sown land devoted on the one hand, to subsistence grain (winter rye) and, on the other, to commercial grain (spring oats) (11). On the otrubs and, to an even greater extent, on the khutors, spring oats occupied a very large share of the sown area relative to winter rye. Whereas in the commune, winter rye was in a position of unchallenged supremacy on the peasants' land, exceeding by 10% the area devoted to spring oats, on the otrubs the share of land under the two crops was much the same, while on the khutors

the share under spring oats was actually greater. This must have had a considerable impact on the economy of the different types of farm. Certainly, judging by the results of a survey conducted by the G.U.Z.i.Z. in 1909, the enclosed farms marketed a greater share of their grain than did the non-enclosed - and the majority was spring oats (Table 76).

Table 76
Percentage of Grain Harvest Marketed on Khutors in the Southern Uyezds of Tula Province, 1909

Average size of khutors in desyatinas)	% of total grain harvest:		Of grain marketed %:	
	Retained	Marketed	Spring Oats	Winter Rye
13.0	58.0	42.0	85.0	15.0
20.0	52.5	47.5	71.2	28.8
45.0*	47.8	52.0	67.0	33.0
farms in commune**	68.0	32.0	NO DATA	

Zemleustroistvo i Zemlepol'sovaniye op.cit., p.5.

*Novikov, op.cit., p.12. (1902)

That the peasants on the enclosed farms could afford to put a greater share of their land under commercial, as opposed to subsistence, gains than their counterparts remaining in the commune was, above all, reflection of the fact that the former had more land relative to the size of their household. On all farms, regardless of their type, sufficient winter rye had to be grown to meet the subsistence requirements of the dependent household; thus farms with a relatively small amount of land per head of population had to devote a proportionately greater share of their land to rye than did those with a larger amount per head. Therefore, the khutors and otrubs simply by virtue of their favourable land ratios, could release a greater share of their land to cash crops than could the non-enclosed. This argument is lent support when it is observed that among both groups of enclosed farms the area of land devoted to spring oats and other crops, increased in direct relation

the increase in farm size, while that under winter rye declined (Table 77 overleaf). Also significant is the finding that, as shown in Table 76 large khutors in Tula marketed 10% more of their grain harvest than did the small.

Unfortunately, the distribution of crops on the enclosed farms cannot be compared with the distribution on farms of similar size and man/land ratios in the commune. It is reasonable to assume, however, that non-enclosed farms in all size groups had a smaller area of their land under commercial grains than their enclosed equivalents; as a result of the existence in the commune of an obligatory three-field rotation all peasants were forced to put half of their sown land under winter crops every year even if this meant that some were thereby producing surpluses of rye. Enclosure afforded the peasants the opportunity to regulate the amount of land they sowed to subsistence and commercial grains so that it was in line with the particular requirements of their household and the market. This was an important freedom to have in a province such as Tula where spring grain was the principal product produced for the market and it was one of which the peasants who enclosed their land were evidently well aware.

A larger share of the sown land on enclosed farms was also under progressive crops (potatoes, vetch, clover and peas) than on the non-enclosed. The difference was greatest in this respect between the khutors and the non-enclosed farms; in the case of the otrubs the difference was only of the order of 1-2 percentage points. Among the khutors the area under potatoes, vetch, clover, peas increased with farm size but the reverse was the case among the otrubs (Table 77).

II - 3c. Livestock

As in Tver Province, enclosure in Tula was accompanied by changes in the number of livestock in the ownership of peasant households. The nature of the changes that took place was governed primarily by the conditions with which the peasant farmer was confronted on his new enclosed farm - the amount of natural and cultivated hay available, the extent of the pastureland and the requirements of the farm and household. It was within these constraints that the changes reflected the priority schedule that each farmer must have had of the types of livestock with which he could dispense and those which, if the opportunity arose, it would be most profitable to purchase.

Table 77

The Distribution of Crops on Arable of Enclosed Farms in
Bogoroditskiy Uyezd by Size, 1912 (9)

and size (in desyatinas)	winter		buck-			pot-			others	
	rye	oats	millet	wheat	wheat	peas	vetch	clover		atoes
OTRUBS										
0.0 - 3.0	45.9	64.9	-	7.9	-	-	3.8	-	22.7	0.7
3.01 - 6.0	43.7	70.9	-	7.9	-	-	4.3	-	15.6	1.3
6.01 - 12.0	40.4	67.1	0.3	10.0	2.0	0.0	1.9	1.0	17.6	0.1
12.01 - 20.0	36.0	66.8	0.4	5.1	0.8	0.2	3.5	1.6	18.4	3.2
>20.01	41.2	70.9	0.8	6.6	0.8	0.6	3.1	2.7	12.8	1.7
Total	41.2	68.6	0.4	7.8	1.0	0.2	3.1	1.1	16.4	0.9
KHUTORS										
3.01 - 6.0	41.4	75.6	-	-	-	6.1	6.1	-	12.2	-
6.01 - 12.0	33.2	58.7	-	5.6	2.2	2.5	5.3	2.5	22.3	0.8
12.01 - 20.0	33.0	59.1	0.8	8.1	0.8	1.7	3.2	2.5	23.2	0.5
>20.01	30.5	60.3	0.7	4.3	0.8	1.2	6.6	4.4	21.1	0.7
Total	31.7	60.0	0.6	5.4	1.0	1.6	5.5	3.6	21.7	0.5

Since, as the evidence presented in the foregoing section would suggest, the cultivation of grain was of utmost importance on the enclosed farms in the southern uyezds of Tula Province, ownership of horses in sufficient numbers to work the arable was essential to the peasants. The importance attached to horse ownership was certainly demonstrated by the behaviour of the peasants who purchased khutors in Bogoroditskiy uyezd: as Tables 78 and 79 show, between the time of enclosure and Mozzhukhin's investigation in 1912, the number of horses per household increased on khutors of all sizes - at the time of enclosure a number of households, in fact, had none. Also, it is important to note that on khutors of all sizes there was an increase in the number of foals which would indicate that the peasants were attempting to ensure that they would have an adequate head of horses in the future.

Table 78

Livestock on the Enclosed Farms in Bogoroditskiy Uyezd Before
and After Enclosure (A)(9)

	Type of Farm:			
	Otrubs		Khutors	
% number	before	after	before	after
without horses:	enclosure	enclosure	enclosure	enclosure
0.0 - 3.0 des.	58.8	75.0	-	-
3.01 - 6.0	5.0	37.8	50.0	0.0
6.01 - 12.0	13.2	7.7	0.0	0.0
12.01 - 20.0	0.0	0.0	0.0	0.0
>20.01 des.	0.0	0.0	0.0	0.0
Total	16.8	25.0	3.6	0.0
	Type of Farm:			
	Otrubs		Khutors	
% number	before	after	before	after
without cows:	enclosure	enclosure	enclosure	enclosure
0.0 - 3.0	29.4	43.8	-	-
3.01 - 6.0	15.0	26.7	50.0	0.0
6.01 - 12.0	7.9	5.1	12.5	16.7
12.01 - 20.0	0.0	0.0	0.0	0.0
>20.01 des.	0.0	0.0	0.0	0.0
Total	10.1	16.4	7.1	5.7

Table 79

Livestock on the Enclosed Farms in Bogoroditskiy Uyezd Before
and After Enclosure (B) (9)

Type and Size of farm (in desyatinas)	Number livestock per farm:																
	Horses		Cattle				Sheep				Pigs		Poultry				
			Foals		Cows		Calves		Sheep						Lambs		
	Fully Grown		A	B	A	B	A	B	A	B	A	B	A	B	A	B	
OTRUBS	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B		
0.0 - 3.0	0.4	0.3	0.1	0.1	0.7	0.6	0.4	0.5	1.9	0.8	1.2	0.4	-	0.6	0.7	5.7	6.1
3.01 - 6.0	1.0	0.7	0.0	0.2	0.9	0.7	0.8	0.6	4.3	2.4	3.6	1.9	-	1.2	0.5	9.3	8.7
6.01 - 12.0	1.5	1.4	0.2	0.5	0.9	1.0	0.6	0.9	5.8	3.8	5.0	3.5	0.2	0.1	1.2	11.7	11.3
12.01 - 20.0	2.0	1.9	0.4	0.5	1.2	1.1	0.7	0.6	6.2	3.2	4.9	2.4	0.1	0.1	1.5	13.1	14.3
>20.01	2.4	2.4	0.5	0.4	1.2	1.1	1.0	1.1	11.3	7.9	10.2	6.1	-	0.1	2.1	14.6	15.7
Total	1.4	1.2	0.2	0.3	0.9	0.8	0.7	0.8	5.5	3.2	4.6	2.7	0.1	0.1	1.3	10.7	10.6
KHUTORS																	
3.01 - 6.0	0.5	1.0	-	-	0.5	1.5	-	1.5	2.5	-	1.0	-	-	0.5	2.0	4.0	9.0
6.01 - 12.0	1.5	1.4	0.3	0.4	0.9	0.8	0.8	0.8	4.0	0.5	3.4	0.6	0.1	0.1	1.3	11.1	11.6
12.01 - 20.0	2.0	2.2	0.3	0.3	1.0	1.1	0.9	1.2	6.7	2.5	5.0	2.0	0.3	0.2	1.6	13.3	16.6
>20.01	2.8	3.3	0.1	0.4	1.6	1.7	1.2	2.1	14.6	7.1	11.5	6.2	0.2	0.2	1.8	25.5	24.1
Total	2.1	2.3	0.2	0.4	1.1	1.2	0.9	1.4	8.6	3.3	6.1	2.8	0.2	0.1	1.5	17.7	17.0

B - At time of enclosure
A - At time of investigation 1912

The situation where the otrubs were concerned was different. In direct contrast to the khutors, the average number of fully grown horses declined after enclosure (Tables 78 and 79) and at the same time the number of households of under 6 desyatinas in size with no horse increased. By 1912, no less than one quarter of the otrubs investigated in Bogoroditskiy uyezd were without a horse to work their land.

The acquisition of horses after enclosure by peasants who moved on to khutors was taken by Mozzhukhin and the officials of the Land Settlement Committee as a sign of the strength of the economy of the newly formed farms. The assumption was challenged by Khryasheva on the basis of an investigation of farms in Yepifanskiy uyezd: she noted that among the small khutors, those with under 6 desyatinas, the area of sown land relative to one horse was half as great as on farms of comparable size in the commune and, indeed, as on the larger khutors (Table 80). Such horsepower, Khryasheva argued, simply was not required on farms of this size and it served to illustrate "the weak position of the small individualised farms" (12).

Table 80

Horses to Sown Land on Enclosed and Non-Enclosed Farms in
Yepifanskiy Uyezd, 1911 (12)

Size of Farm (in desyatinas)	Number desyatinas sown land per 1 horse on:	
	Khutors	Farms in commune
3.1 - 6.0	2.1	4.2
6.1 - 9.0	4.5	4.3
9.1 - 15	4.4	4.7
>15	5.3	5.6
Total	4.6	4.5

Evidently this situation was forced on the peasants by the mere act of withdrawal from the commune; in the commune peasants acquired horses only when they had sufficient land to support them, the normal practice being for the small horseless households to borrow from their neighbours. With the dissolution of communal ties such practices

ceased and all farms, regardless of their size, were put in a position whereby they were obliged to purchase their own horse to work the land even though the result might be that their economy was overstrained and the horses under-utilised.

Khryashcheva was well known for her 'populist' (13) view of the commune, but the argument would in essence seem to have had foundation; in Bogoroditskiy uyezd, as in Yepifanskiy, the number of horses kept on the small khutors relative to the sown area was well out of proportion with the number kept on the larger farms and on farms in the commune (Table 81), this in spite of the fact that fewer horses should have been required per desyatina to work a consolidated land unit than a fragmented holding (p.212).

Table 81

Horses to Sown Land on Enclosed Farms in Bogoroditskiy Uyezd, 1912
(9)

Size of farm (in desyatinas)	Number desyatinas sown land per 1 fully grown horse on	
	otrubs	khutors
0.0 - 3.0	9.0	-
3.01 - 6.0	5.7	3.5
6.01 - 12.0	5.0	3.5
12.01 - 20.0	5.3	5.0
>20.01	6.0	5.7
Total		5.0

The pattern of change as a result of enclosure in the number of cattle, pigs and poultry kept by peasants moving on to different types of enclosed farms was essentially the same as for horses. During the period between enclosure and the 1912 investigation in Bogoroditskiy uyezd, the number of cattle increased on khutors of all sizes and so did the number of pigs and poultry, but the number stayed the same or declined on the otrubs (Table 79). The decline was greatest on the small sized otrubs and among these farms there was an increase in the number of households with no cattle at all - fully grown or calves. Where sheep were concerned, the pattern was the same on khutors and otrubs where the numbers dropped dramatically - by 2 to 8 head.

The difference several years after enclosure between the various types of enclosed farms in the number of livestock owned is clearly illustrated by Mozzhukhin's survey. The khutors were far better endowed with all types of livestock than were the otrubs and this was true of farms in equivalent size groups. Among the khutors and otrubs there were also differences in the number of livestock held on farms of different sizes. Compared with the farms remaining in the commune, the khutors were better endowed with all types of livestock, the one exception being the number of sheep. The number of livestock on the otrubs, on the other hand was either the same or lower than in the commune, the latter being particularly the case for sheep, pigs and poultry (Table 82).

Table 82
Livestock on Enclosed and Non-Enclosed Farms in Bogoroditskiy Uyezd
1912 (9)

Type of farm	Year	Per one farm number of:					% number farms without:			
		Horses	Cattle	Sheep	Pigs	Horses	Cows	any live-stock		
		full grown foals	cows calves							
Otrubs	1912	1.2	0.3	0.8	0.8	3.2	0.1	25.0	16.4	33
Khutors	1912	2.3	0.4	1.2	1.4	3.3	0.1	0.0	5.7	3.6
Farm in Commune	1911	1.2	0.3	0.8	0.7	4.6	0.1	22.2	17.3	13.2

VII - 3d. Farm Implements and Machinery

Enclosure was accompanied not only by changes in the number of livestock held on peasant farms but also by changes in the number and type of farm implements and machinery owned. So far as it is possible to judge from the data available for Bogoroditskiy uyezd, there was a definite trend on khutors and otrubs alike, first, for the total number of implements owned to increase and, secondly, and more importantly, for new implements to take the place of the old. During the period between enclosure and the time of Mozzhukhin's investigation, the number

of households which owned no implements at all declined (with the exception of those on the very smallest otrubs) so that by 1912 all the khutors and over 85% of the otrubs had at least some:

Table 83

Farm Implements on the Enclosed Farms in Bogoroditskiy Uyezd
Before and After Enclosure (A) (9)

Size of farm (in desyatinas)	% number of farms without any farm implements			
	before enclosure	after enclosure	before enclosure	after enclosure
0.0 - 3.0	58.8	70.6	-	-
3.01 - 6.0	17.5	17.8	50.0	0.0
6.01 - 12.0	13.2	5.1	0.0	0.0
12.01 - 20.0	0.0	0.0	0.0	0.0
>20.0	0.0	0.0	0.0	0.0
Total	16.8	13.7	3.6	0.0

Among both groups of farms, the number of old-fashioned implements - the Sokha and the wooden harrow - declined but the number of modern single and double-share iron ploughs and iron-toothed harrows increased (Table 84 overleaf). This meant that as time progressed the land on the enclosed farms was worked more thoroughly and ploughed to a greater depth than on farms in the commune and this must have had an influence on yields. The number of agricultural machines on the enclosed farms also increased, the peasants purchasing mechanical mowers, threshers and winnowers, but the overall numbers remained low (Table 85 overleaf).

Although virtually all the enclosed farms had by 1912 acquired some implements with which to work their land, differentials between farms of different type and size remained considerable and actually increased in respect of certain of the implements and machines. The khutors, predictably, had more modern farm implements and machinery than did otrubs of the same size, while among both groups the large holdings were better equipped than the small; iron harrows, threshing machines and winnowing machines were confined almost exclusively to the large khutors and otrubs.

Table 84

Farm Implements on the Enclosed Farms in Bogoroditskiy Uyezd
Before and After Enclosure (B) (9)

Type of farm and size (in desyatinas)		Time	Per 100 farms number of:				
			sokha	single- share	ploughs double share	total	wooden
OTRUBS							
0 - 3.0	B	41.0	12.0	-	12.0	35.0	18.0
	A	31.0	13.0	-	13.0	25.0	13.0
3.01 - 6.0	B	100.0	10.0	10.0	20.0	68.0	30.0
	A	89.0	33.0	18.0	51.0	42.0	44.0
6.01 - 12.0	B	95.0	3.0	24.0	26.0	63.0	42.0
	A	100.0	15.0	64.0	79.0	51.0	72.0
12.01 - 20.0	B	131.0	-	69.0	69.0	85.0	38.0
	A	114.0	-	100.0	100.0	57.0	93.0
>20.01	B	146.0	-	85.0	85.0	62.0	92.0
	A	136.0	7.0	121.0	121.0	57.0	107.0
Total	B	100.0	6.0	28.0	28.0	64.0	40.0
	A	93.0	19.0	50.0	50.0	46.0	61.0
KHUTORS							
3.01 - 6.0	B	50.0	-	-	-	50.0	-
	A	100.0	50.0	-	50.0	50.0	50.0
6.01 - 12.0	B	100.0	13.0	38.0	50.0	50.0	75.0
	A	92.0	17.0	50.0	67.0	17.0	83.0
12.01 - 20.0	B	129.0	-	86.0	86.0	43.0	86.0
	A	122.0	22.0	100.0	122.0	33.0	111.0
>20.01	B	145.0	9.0	100.0	109.0	45.0	145.0
	A	158.0	8.0	150.0	158.0	58.0	158.0
Total	B	121.0	7.0	71.0	79.0	50.0	100.0
	A	123.0	17.0	94.0	111.0	37.0	114.0
Av. for farms in commune		106.7	N.D.	N.D.	53.0	70.1	60.7

B - at time of enclosure

A - at time of investigation

Table 85

Farm Machinery on Enclosed Farms in Bogoroditskiy Uyezd
Before and After Enclosure (9)

Type of farm and size (in desyatinas)		Per 100 farms number of:				
		iron harrows	mechanical mowers	threshing machines	winnowing machines	
OTRUBS						
0.0 - 3.0	B	-	-	-	-	
	A	-	-	-	-	
3.01 - 6.0	B	-	-	-	5.0	
	A	-	2.0	-	8.0	
6.01 - 12.0	B	-	-	3.0	10.0	
	A	-	3.0	8.0	15.0	
12.01 - 20.0	B	-	8.0	12.0	31.0	
	A	-	18.0	14.0	32.0	
>20.01	B	-	8.0	23.0	38.0	
	A	7.0	14.0	43.0	68.0	
Total	B	-	2.0	5.0	12.0	
	A	1.0	5.0	9.0	18.0	
KHUTORS						
3.01 - 6.0	B	-	-	-	-	
	A	-	-	-	-	
6.01 - 12.0	B	-	-	25.0	19.0	
	A	8.0	-	8.0	21.0	
12.01 - 20.0	B	-	-	14.0	21.0	
	A	-	11.0	22.0	50.0	
>20.01	B	-	-	45.0	55.0	
	A	8.0	29.0	58.0	32.0	
Total	B	-	-	29.0	47.0	
	A	6.0	13.0	29.0	16.0	
Ave. for farms in commune		1911	0.5	0.2	8.9	16.3

B - at time of enclosure

A - at time of investigation

VII - 3e. The Use of Fertilisers

As the low productivity of peasant farming in Tula Province can very largely be attributed to the decline in soil fertility towards the end of the nineteenth century, it is especially important to examine how the enclosed farms compared with their non-enclosed counterparts in respect of the amount of fertiliser they had available for use on the fields.

Examination of Table 86 reveals that a larger share of the arable was fertilised on the enclosed than on the non-enclosed farms in Bogoroditskiy uyezd and that the period of time during which any single parcel of land was left without being fertilised was considerably shorter.

Table 86

Use of Fertilisers on Enclosed and Non-Enclosed Farms in
Bogoroditskiy Uyezd, 1912 (9)

Type of farm	% No.farms not using fertilisers	Av.No.des.of sown land fertilised per farm	% of all sown land fertilised in group	No.years elapsing between use of given parcel of land
otrubs	35.2	1.0	7.4	11.7
khutors	11.4	1.8	10.3	9.8
Farms in Commune	N.D.	0.5	4.3	23.0

But the record of the enclosed farms, while better than the non-enclosed, was not impressive and this was particularly true of the otrubs. Among the otrubs, over one third of all households did not use any fertiliser, organic or artificial, on their land at all and those that did, had sufficient to apply only to 1 desyatina. In all, well under 10% of the arable on the otrubs in Bogoroditskiy uyezd was fertilised annually. The situation on the khutors was somewhat better as the vast majority did use some fertiliser although on average under 2 desyatinas of land were treated annually; only just over 10 % of all the arable on the khutors as a group was fertilised.

One respect in which the economic strength of the khutors was demonstrated was that a considerable number of them - over one third - were able to afford to purchase artificial fertilisers and their dependance upon livestock as a source of fertiliser was thus reduced. The otrubs, in contrast, continued to rely almost exclusively on manure to fertilise their fields. As with all the other aspects of farming so far considered, there were marked differences between farms according to their size. Among both the khutors and otrubs, the number of households using fertilisers and the area of land thus fertilised increased in direct relation to the increase in the size of farm (Table 87).

VII - 4. The System of Farming and the Farming Economy on the Enclosed Farms

The argument already stated in relation to the enclosed farms in Tver namely that the mere fact of ownership of relatively large numbers of livestock and modern farm machinery, the cultivation of 'progressive' crops and the use of artificial fertilisers was not necessarily an indication that the peasants had adopted a system of high farming, holds true also for the enclosed farms in Tula Province. However, whereas in Tver there appeared to be a definite trend on the enclosed farms in the direction of the introduction of up-to-date systems of farming with the use of ley grass rotations on the arable and the development of commercial livestock husbandry, the available evidence suggests that among the enclosed farms in Tula Province a comparable trend was almost entirely absent. In the communes of Tula it was not only ignorance of alternative methods on the part of the peasants but also the desire to produce the maximum possible amount of grain that served to perpetuate the existing three-field system of farming and acted as a bar to the introduction of more intensive systems. These same constraints would seem to have operated over the peasants who moved on to the enclosed farms for, although enclosure gave them the freedom to use their land as they wished, the majority continued to farm it in the same way and with the same ends in view as they had done in the commune.

Contemporary reports tend to indicate that there was little change in the type of rotation used on the peasants' farms after enclosure in Tula Province. In 1909, for example, as a result of their survey in the southern uyezds of the Province, officials of the Land

Table 37

Use of Fertilisers on Enclosed Farms in Bogoroditskiy Uyezd by Size
1912 (9)

Type and size of farm (in desyatinas)	Organic Fertilisers:				Artificial Fertilisers:				% of all arable land per farm fertilised
	% No.farms not using fertilisers	% No.farms using them	Av.No.des. fertilised per farm	Av.No.puds used per farm	% No.farms using them	Av.No.des. fertilised per farm	Av.No.Puds used per farm		
OTRUBS									
0.0 - 3.0	50.0	50.0	0.3	0.6	6.2	0.5	8.0	6.5	
3.01 - 6.0	40.0	55.6	0.6	0.9	2.2	0.5	25.0	7.0	
6.01 - 12.0	35.9	64.1	0.9	2.0	5.1	0.7	12.5	3.7	
12.01 - 20.0	21.4	78.6	1.2	2.1	7.1	3.0	11.0	7.6	
>20.01	14.3	78.6	2.1	5.2	14.3	0.5	6.0	8.2	
Average	35.2	62.5	0.9	2.0	5.5	0.9	11.6	7.4	
KHUTORS									
3.01 - 6.0	50.0	-	-	-	50.0	1.0	20.0	7.4	
6.01 - 12.0	8.3	91.7	0.9	1.9	16.7	1.1	24.0	12.4	
12.01 - 20.0	22.2	77.8	1.4	2.3	33.3	2.3	40.0	9.5	
>20.01	0.0	100.0	2.0	4.2	58.3	0.8	14.0	10.2	
Average	11.4	85.7	1.5	2.9	37.1	0.6	11.0	10.3	

Settlement Committee reported that, "..... khutor farmers for the most part carry out the normal three-field system although multiple-field rotations are occasionally met" (14) and further that, "..... today's khutors carry out the most primitive and rapacious methods of farming" (15). Mozzhukhin, on the other hand, maintained that enclosure resulted in the "beginning of the end of the three-field system" although he was forced to qualify this by adding that, "for various reasons we cannot expect an immediate improvement after the Reform" (16).

The evidence from Bogoroditskiy and Yepifanskiy uyezds does indeed show that the number of enclosed farms that had adopted multiple-field or four-field rotations or were in a transitional stage was small:

Table 88
Rotations used on Enclosed Farms in Bogoroditskiy and Yepifanskiy
Uyezds

Type of rotation in use	Bogoroditskiy Uyezd (9)		Yepifanskiy Uyezd (3) khutors and otrub- hamlets	
	otrubs	khutors	otrubs	
Pestropol'ye	32.5	28.6	-	-
Three-field	54.0	28.6	89.6	72.5
Transition to four-field	-	-	1.2	5.1
Four-field	11.9	40.0	-	-
Transition to multiple-field	-	-	0.8	1.0
Multiple-field	1.6	2.9	7.9	20.0
Others	-	-	0.7	1.4

It is true that over 40% of the khutors investigated in Bogoroditskiy uyezd had adopted more complex rotations, but they constituted a minority of all enclosed farms. In neighbouring Yepifanskiy uyezd, only just over one quarter of khutors and otrub-hamlets had abandoned the three-field in favour of more advanced rotations. Meanwhile of one hundred and eighteen khutors investigated by the G.U.Z.i.Z. in the southern uyezds in 1909, only four had actually begun to operate fully-fledged four or six-field rotations with an additional sixteen "on the verge of

changing"; that is under 20% of the total (17). The number of otrubs on which more advanced rotations had been, or were in the process of being, adopted was very limited indeed - under 14% of the total in both Bogoroditskiy and Yepifanskiy uyezds.

The new rotations that were introduced on the enclosed farms in Tula were far less sophisticated than those being adopted on similar farms in Tver Province. "All", so Zemleustroystvo i Zemlepol'sovaniye reported, "were very simple and led to the least possible decrease in the area under grain" and were characterised by the preference shown for root crops rather than ley grasses (18). The one most commonly adopted was the simple four-field rotation of rye - potatoes - oats - fallow under which the area sown to grain was reduced only from two-thirds to one half of the total arable. Other crops were included on some farms; for instance, on one of the farms investigated in 1909, vetch was sown in the fallow field giving a rotation of rye - potatoes - oats - vetch and fallow. In the case of this farm the fallow field was fertilised and ploughed in the early spring and then sown to vetch which was harvested by the middle of June, leaving the field available for the planting of winter grain. In the census of Yepifanskiy uyezd, however, it was noted that on a number of farms there was a tendency to grow not only vetch but also minor spring grains and potatoes in the fallow field without fertilisers which had "almost destroyed the proper functioning of the four-field rotation" (19). More complex rotations which included fields for the cultivation of ley grasses were rare. Nevertheless, on one farm investigated in Bogoroditskiy uyezd there was a six-field rotation of fallow - rye - oats - clover - clover - potatoes and on another an eight-field rotation of fallow - rye - potatoes - oats - vetch - potatoes - oats - vetch in which the area under grain was reduced to approximately one-third of the arable (20).

On the majority of enclosed farms, however, changes such as those described above simply did not take place. Instead, the three-field rotation continued to be used or, what was worse, no correct rotation established at all. In Bogoroditskiy uyezd, the three-field rotation was in use on over one half of the otrubs, while in Yepifanskiy uyezd the figure for all types of enclosed farms was much higher - over three quarters. In defence of the enclosed farms, Mozzhukhin argued that the continued existence of the three-field rotation was not indicative of the farms' lack of progress for various improvements in

the technique of working the soil could be introduced to make the system give high yields. The example of one peasant on a khutor in Kashinskiy uyezd can be quoted in support of Mozzhukhin's argument: "Ivan Kuznetsov still carried out a three-field rotation but with improved working of the soil even with the preservation of the three-field system he therefore is able to satisfy all the food requirements of his family and from the farm's profit pay back his debt to the Peasant Land Bank" (21). How typical was the experience of this peasant it is not possible to state.

If the majority of enclosed farms that continued to use the three-field rotation were no more advanced than peasant farms in the commune, those on which no rotation at all was established were in a definitely inferior position. On over one quarter of the khutors and nearly one-third of the otrubs in Bogoroditskiy uyezd, the arable was cultivated without there being a regulated succession of crops and without fallow (pestropol'ye). This, given the emphasis on grain cultivation and the comparatively limited use of fertilisers, could only result in rapid soil exhaustion. It is possible that the absence of a fixed rotation of crops on the enclosed farms was only a temporary phenomenon but this seems unlikely since nearly all the farms had been in existence for several years and their owners had had adequate time during which to organise a cropping cycle. What these farms proved was that the freedom in decision-making enclosure gave to the peasants, while obviously creating conditions favourable for the introduction of progressive methods in farming, at the same time removed any safeguards against degeneration. The obligatory three-field rotation forced upon peasants in the commune had many defects, but it was definitely preferable to there being no rotation at all.

The type of rotation used on the khutors and otrubs in Bogoroditskiy uyezd tended to vary among farms in different size groups. (Table 89 overleaf) Interestingly, however, the three-field rotation was just as dominant on the large enclosed farms as on the small, and four and multiple-field rotations, while absent on the smallest khutors and otrubs, were as common on medium sized farms (6-20 desyatinas) as on the very largest. The degeneration into pestropol'ye was observed on farms included in all size groups.

Table 89

Rotations Used on Enclosed Farms in Bogoroditskiy Uyezd by Size
of Farm, 1912 (9)

Type and size of farm (in desyatinas)	% number households using:			
	Pestro- pol'ye	three- field	four- field	multiple- field
OTRUBS				
0.0 - 3.0	50.0	50.0	-	-
3.01 - 6.0	39.5	53.5	7.0	-
6.01 - 12.0	20.5	59.0	18.0	2.6
12.01 - 20.0	28.6	42.9	28.6	-
>20.01	28.6	57.1	7.1	7.1
Total	32.5	54.0	11.9	1.6
KHUTORS				
3.01 - 6.0	50.0	50.0	-	-
6.01 - 12.0	25.0	41.7	33.3	-
12.01 - 20.0	44.4	11.1	33.3	11.1
>20.01	16.7	25.0	58.3	-
Total	28.6	28.6	40.0	2.9

Mozzhukhin in his analysis of the changes in the system of farming on the enclosed farms he investigated in Bogoroditskiy uyezd attached considerable importance to what he termed the 'technique' of arable cultivation - the time chosen by the peasants to plough the land destined for the winter and spring grains. He was right to emphasise its importance for although the environment in Tula was favourable for agriculture, the relatively flat terrain, unprotected by woodlands or shelter belts, combined with fairly low precipitation levels, meant that there was a constant danger of soil dessication and erosion if the land was not worked carefully. In the commune the time of ploughing was fixed partly by convention and partly by necessity. Fallow was left unploughed until the end of June and, after the harvest, stubble was left standing in the fields. Both these practices were necessary if the peasants' livestock was to have adequate grazing land (p.96), but they prevented the peasants from taking measures that would have helped decrease the risk of erosion of their land; the stubble remaining on the fields if ploughed back into the soil immediately after the harvest would have helped to conserve moisture and, similarly, the moisture content, structure and fertility of the soil could have been improved by ploughing the fallow early, two months rather than a week before planting. The soil scientist Pryanishnikov after a study tour of the northern black-earth provinces came to the conclusion that, "..... a significant increase in grain yields can be obtained simply by timely ploughing in the black-earth belt. This increase would be due to a large extent to greater moisture content and better soil structure resulting from early ploughing" (22).

Farmers on enclosed holdings, no longer obliged to allow their neighbours' livestock to graze on their land, were free to adjust the times of ploughing to suit the requirements of their farms. In Bogoroditskiy uyezd early ploughing of the fallow field was fairly widespread on both the khutors and otrubs, although it was more common on the former than on the latter and on the larger farms (Table 90 overleaf). The greatest increase in the length of time between ploughing and planting was on khutors over 12 desyatinas in size - the majority now ploughed by the end of May. The same was true, although to a lesser extent, of the equivalent sized otrubs. The small otrubs, however, continued to plough the fallow field in June and, even though this took place in the beginning or the middle of the month, the improvement over the situation in the commune was only marginal.

Table 90
Ploughing Regime on the Enclosed Farms in Bogoroditskiy Uyezd
1912 (9)

Type and size of farm (in desyatinas)	% number farms on which fallow ploughed in:								
	Autumn			April			May		
				Begin -ning			Begin -ning		
				Mid	Late		Mid	Late	July
OTRUBS									
0.0 - 3.0	-	-	-	14.3	28.6	-	42.9	14.3	-
3.01 - 6.0	3.0	6.1	-	24.2	15.1	18.2	18.2	6.1	9.1
6.01 - 12.0	3.0	6.1	12.1	18.2	12.1	6.1	12.1	30.3	-
12.01 - 20.0	-	-	-	28.6	28.6	42.9	-	-	-
>20.01	15.4	-	7.7	23.1	15.4	15.4	7.7	15.4	-
Total	4.0	4.0	5.0	22.0	17.0	16.0	14.0	10.0	8.0
KHUTORS									
3.01 - 6.0	-	-	-	-	50.0	-	50.0	-	-
6.01 - 12.0	-	25.0	16.7	25.0	8.3	-	-	25.0	-
12.01 - 20.0	22.2	11.1	22.2	11.1	11.1	-	11.1	11.1	-
>20.01	16.7	-	25.0	25.0	8.3	16.7	-	8.3	-
Total	11.4	11.4	20.0	20.0	11.4	5.7	5.7	14.3	-

One of the reasons why peasants on the small otrubs continued to plough late was that, like their neighbours in the commune, they had to use the fallow field for grazing livestock. The problem of providing sufficient pastureland for livestock was considerably greater on the enclosed than on the non-enclosed farms; this is illustrated by the universal decline in numbers of sheep, and, in the case of otrubs horses and cattle as well. As in Tver Province, peasants moving on to enclosed farms in Tula suffered from the fact that on enclosure they often lost communal grazing rights but, in addition, there were other causes for the difficulties: "The insignificant amount of natural hayland, the predominance of grain cultivation as well as the tradition of common pasturage", as Mozzhukhin explained, "(could not) help but put the enclosed farmers in a difficult position" (23). The remedy suggested was the same as in Tver, namely, to feed livestock for the greater part of the year on hay. The possibilities for this were, however, limited given the existing volume of hay and fodder crop production. Zemleustroystvo i Zemlepol'sovaniye reported in 1909 that one quarter of the khutors it investigated had insufficient hay to meet their winter requirements, let alone a surplus to cover some of the spring and summer months.

Only a small percentage of the enclosed farms, therefore, practised summer stall feeding and other methods had to be found of overcoming the shortage of pastureland. On the khutors in Bogoroditskiy uyezd, the most widespread practice was to graze livestock either tethered on ropes or in paddocks during the summer. On a relatively large number, however, natural permanent pasture rented or owned by individual or small groups of khutors, continued to be used. Among the otrubs, communal grazing, in fact, remained the norm and not only did this take place on the former or newly created common pastureland but also on fallow and on the mown hayland. Some otrubs arranged their fields so that the fallow lay adjacent to that of their neighbour's and thus could be used jointly, while others with contiguous plots of hayland destroyed the boundary fence and opened them up for common grazing. Peasants on the otrubs, it would appear, were unable, or simply reluctant, to abandon their familiar methods of summer pasturing, and in this respect they fell a long way behind the khutors. "The khutors" Dubrovskiy explained, "..... had a more satisfactory distribution of land uses than the otrubs which enabled them to maintain their livestock more easily" (24). On the otrubs, he continued, "... the difficulties ... associated with providing pasture for livestock were intensified by

the greater distance of land from the usadba" (25). Mozzhukhin similarly argued that the khutors "were able to cope with the problem (of pasturage) better than the rest" (26). Accounting for what he saw as a considerable difference in the ease with which livestock were maintained on enclosed farms in various parts of the Empire, Mozzhukhin went on to argue that: "In the northwest, where earlier the cultivation of fodder crops had been introduced, the peasants were able to adapt more easily to the stall feeding of their livestock on their enclosed farms than in the Central Agricultural Region here there were not the corresponding conditions and necessary skills "(27)

In view of the difficulties experienced in fodder provision, the enclosed farms in Tula Province could not be expected to show any signs of developing commercial livestock husbandry as a branch of farming. Accordingly, it was possible for Zemleustroystvo i Zemlepol'sovaniye to report; "Commercial dairy farming is not developed on the khutors. The number of farms selling livestock products is very small indeed and does not exceed 5% of the total" (28). With the exception of the smallest, on none of the khutors and otrubs in Bogoroditskiy uyezd did the number of cows exceed that of horses (see p.251) and on most the number was considerably lower. The likelihood of any branch of commercial livestock farming being developed in the future on the enclosed farms was very remote. Meanwhile, it was certain that grain production would remain the dominant commercial interest on all farms.

From all the above, it is evident that changes in the direction of the improvement of the system of farming were very limited on the enclosed farms investigated in Tula Province; the majority of farmers continued to farm in the same primitive way as they had done in the commune, while on some farms the standard of farming after enclosure fell. One zemstvo agronomist on his report for 1910 noted that, "..... for the most part the khutors and otrubs suffer from the same problems as normal peasant farms in the commune" which he enumerated as being:

- spoilt and unproductive soils
- the use of outdated agricultural implements "not answering the demands of cultivation in the Province"
- too few livestock and hence too little manure in relation to the amount of arable
- high expenditure which could not be covered by the profit from farming
- over-emphasis on grain cultivation (29).

Khryasheva, meanwhile, came to the conclusion that the khutors in Yepifanskiy uyezd as they were in 1911 "were no more than small privately owned farms, the economy of which differs little from that of analogous types of peasant farm in the commune" (30).

Nevertheless on some farms, but only the barest minority, there was an improvement in the system of farming after enclosure marked by the adoption of multiple-field rotations, the diversification of crop production, the more intensive use of manure and the introduction of the earlier and deeper ploughing of the fallow. All these tendencies, however, as Mozzhukhin was ready to point out were "more dominant on the khutors than on the otrubs and at the same time were more in evidence on the farms with a large amount of land than on those with less" (31).

VII - 5. The Productivity of the Land on the Enclosed Farms

Although there is no way of telling whether yields for the crops on the peasants' land actually increased after enclosure or indeed whether they were higher than those obtained in the commune, the figures that are available relating to yields do reflect the differences already observed between enclosed farms of different type and size. Thus, predictably, in Bogoroditskiy uyezd, yields were on average higher on the khutors than on the otrubs - of the order of 15-20 puds for the principal grains (Table 91 overleaf). Among the khutors, yields for all crops were highest on the largest farms, those with over 20 desyatinas of land, but the same did not hold true for the otrubs. Where the latter were concerned, yields were in fact lowest for most crops on the largest farms, a circumstance that can be explained presumably by the fact that it was among this group that the tendency was most strongly developed to put the maximum possible amount of land under the plough without a simultaneous change in rotation or significant increase in the fertiliser input. The G.U.Z.i.Z. investigation included returns for yields on the enclosed farms on the land of the Peasant Land Bank and on farms in the commune and on nobles' estates. These are presented in Table 92 overleaf. As is evident, yields on the enclosed farms for the major crops exceeded those obtained in the commune but were lower than on the nobles' estates, this in contrast to the situation in Rzhevskiy uyezd.

Table 91

Yields on the Enclosed Farms in Bogoroditskiy Uyezd by Size 1912 (9)

Type and size of farm (in desyatinas)	Yields in puds per desyatina for:							
	winter rye	spring oats	Milletts	buck wheat	spring wheat	Peas	vetch	clover potatoes
OTRUBS								
0.0 - 3.0	50.5	76.2	-	67.7	90.0	-	-	934.4
3.01 - 6.0	40.0	72.7	-	58.9	54.7	-	50.0	695.0
6.01 - 12.0	45.1	73.4	83.6	61.8	60.9	42.9	11.8	670.0
12.01 - 20.0	59.7	76.7	52.5	66.0	10.0	46.7	31.1	581.2
>20.01	37.4	68.9	10.0	77.0	20.9	61.8	38.1	535.1
Average	44.6	72.8	39.5	64.6	38.8	54.2	14.1	645.0
KHUTORS								
0.01 - 6.0	57.2	88.1	-	-	-	48.0	40.0	500.0
6.01 - 12.0	54.8	81.3	-	50.9	29.0	38.7	40.0	638.0
12.01 - 20.0	55.7	84.1	143.6	78.7	60.0	63.4	23.5	766.6
>20.01	81.5	91.6	53.8	56.8	11.5	40.5	46.4	546.5
Average	64.9	88.3	84.7	64.1	26.3	46.5	39.6	618.0

Table 92

Yields on Enclosed and Non-Enclosed Farms and on the Estates of the Landed Nobility in Yepifanskiy Uyezd, 1912 (3)

Type of farm	Yields in puds per desyatina for:			
	winter rye	spring wheat	spring oats	Potatoes
Enclosed	69.1	43.1	80.0	611.6
Farms in commune	60.0	35.0	75.0	550.0
Estates of Nobility	75.0	48.0	85.0	750.0

VII - 6. Output Per Head on the Enclosed Farms

Since grain production was the principal activity of peasant farmers on the enclosed farms, the relative success economically of different farms can be measured by comparing the output per head of the principal grains obtained after enclosure. It has been possible to calculate this from the data contained in Mozzhukhin's census in Bogoroditskiy uyezd:

Table 93

Output of Grain per Head on Enclosed Farms in Bogoroditskiy Uyezd, 1912
(9)

Size of farm (in desyatinas)	Otrubs		Khutors	
	Winter rye	Spring oats	Winter rye	Spring oats
0.0 - 3.0	15.2	17.6	-	-
3.01 - 6.0	13.8	22.8	15.1	24.8
6.01 - 12.0	14.6	23.6	15.2	26.7
12.01 - 20.0	26.3	37.9	24.4	44.2
>20.01	23.1	43.1	34.8	53.8
Average	17.4	28.1	25.4	44.6

As the table shows, the output per head of subsistence, commercial and minor grains was considerably greater, with one or two exceptions, on khutors than otrubs in all size groups, and on the larger farms in general than on the small. While these differences can in part be put down to the variation in yields described above, probably a more important factor was the difference in man/land ratios. Whatever the reason, however, it is clear that the amount of grain available for sale, and hence the profit margin, must have been greater on some of the enclosed farms than others and that this, as with all aspects of their farming economy, was related to the size and type of farm.

VII - 7. The Involvement of Peasants on the Enclosed Farms in Off-farm Employment

That there was a considerable difference in the profitability of farming among the enclosed farms is to a large extent confirmed by the figures relating to the degree to which different households were involved in off-farm employment. As Table 94 overleaf shows, fewer of the enclosed farms as a group in Bogoroditskiy uyezd were involved in off-farm employment than were farms in the commune, suggesting that their farming economy was more profitable, but the actual number varied between the farms concerned. Involvement in off-farm employment was most widespread among the otrubs and particularly those with under 12 desyatinas of land. The majority of peasant wage workers originating on otrubs sought employment outside the uyezd and a fair proportion of them had by 1912 severed their ties with farming completely, although it is possible that they sent some of their earnings to their parent household. The remainder, those who worked within the boundaries of Bogoroditskiy uyezd and who had not abandoned their interest in farming, presumably continued to labour full or part time on their otrubs and possibly, like the peasant Solovev in Tver uyezd, viewed their involvement in off-farm employment as a temporary measure, necessary until farming began to yield high returns.

The pattern of involvement in off-farm employment on the khutor in Bogoroditskiy uyezd is interesting: although as a whole fewer than among the otrubs or farms in the commune, the percentage number of households on khutors involved was high on farms on all sizes. The explanation for this seeming anomaly probably lies in the fact that on enclosure greater costs were incurred by peasants moving on to purchased

Table 94
Off-Farm Employment on Enclosed Farms in Bogoroditskiy
Uyezd, 1912 (9)

Type and size of farm (in desyatinas)	% No.farms involved in off-farm employment	% of peasants thus involved employed:		% of male peasants thus involved who had severed ties with farming
		within uyezd	outside uyezd	
OTRUBS				
0.0 - 3.0	50.0	58.3	41.7	44.4
3.01 - 6.0	84.4	48.1	51.9	38.8
6.01 - 12.0	74.4	45.1	54.9	60.5
12.01 - 20.0	28.6	62.5	87.5	25.0
>20.01	28.6	38.5	61.5	41.7
Average	68.0	47.3	52.2	46.3
KHUTORS				
3.01 - 6.0	50.0	100.0	-	-
6.01 - 12.0	58.3	81.8	18.2	33.3
12.01 - 20.0	33.3	75.0	25.0	50.0
>20.01	58.3	66.7	33.3	35.3
Average	51.4	71.4	28.6	35.5

khutors than by peasants who remained in their former village and simply consolidated their allotment land. The households on khutors not only had to repay loans to the Land Settlement Committee for the removal of buildings but also the Peasant Land Bank for the purchase of the farm in the first place. These debts were common to farms of all sizes and, evidently, many sought the same method of earning the money quickly to repay them. Significantly, in the case of khutors and in contrast with otrubs, the majority of peasants employed outside agriculture worked locally and only a small proportion of them severed their ties with farming. This would suggest that for many, such employment was a temporary expedient, how temporary, however, it is impossible to determine. Given the size of the debts accruing to some of the khutor farmers, it would probably be many years before they would be able to devote themselves exclusively to farming. It is important in this respect to remember that, just as was the case in the commune, the involvement of peasants in off-farm employment might well have deprived the khutors of the most energetic and innovative members of the work-force, those indeed who could best have helped transform farming to a higher level; the same is true of the otrubs.

VII - 8. The Peasants' Appraisal of the Enclosed Farms

In the final analysis, perhaps the most accurate picture of the relative success of enclosure in Tula Province can be obtained by examining the attitude of the peasants themselves to farming on enclosed holdings. In Bogoroditskiy uyezd, Mozzhukhin questioned the peasants on the khutors and otrubs he investigated, firstly, as to whether in the light of their experience they were for or against farming on the enclosed farms and, secondly, as to what they had found to be the principal advantages and disadvantages of the new organisation. The answers given are revealing.

Of all the peasants questioned, under one half were prepared to say without qualification that they were in favour of farming on their enclosed holding; the remainder either stated that they were only partially in favour or, alternatively, that they were against it altogether. The latter group of peasants constituted no less than 28.8% of the total.

Table 95

Peasants' Appraisal of Enclosed Farms in Bogoroditskiy Uyezd, 1912 (9)

Type of farm	% number of peasants				
	In favour of enclosed farms	Against enclosed farms	Partially in favour	"Don't know"	Unknown attitude
Otrubs	43.0	30.5	18.0	6.2	2.3
Khutors	48.6	22.9	25.7	-	2.9
Average	44.8	28.8	19.6	4.3	2.5

The distribution of answers among peasants on the two types of enclosed farms varied - predictably, a larger proportion of peasants on khutors turned out to be in favour of the new order than on the otrubs and, similarly, a larger proportion were partially in favour. Nearly one third of all otrub farmers reported that they were against the new order.

Among the peasants on both khutors and otrubs, the principal advantage of farming on an enclosed holding was seen to be the freedom it gave the owner in decision-making (Table 96 overleaf). As already observed, however, this freedom could sometimes result in a degeneration of the standard of farming. The second most frequently recorded advantage given by the peasants on the khutors was that enclosure allowed improvements to be introduced in livestock husbandry, and the third that hereditary ownership gave the peasant confidence and incentive to invest work and capital on to his farm. Fewer peasants on the otrubs considered that enclosure helped them to improve the standard of livestock husbandry - not surprising in view of the problems they seem to have faced in this sphere - but they agreed with the peasants on khutors about the confidence hereditary ownership gave them where investment was concerned and also rated highly the advantages accruing from holding land in a single spatial unit.

Of the disadvantages associated with farming on an enclosed holding, that most frequently mentioned by peasants on both the khutors and otrubs was that it was difficult to maintain livestock. Obviously, therefore, the enclosed farmers were clearly split between those for whom the transfer had eased the situation with respect to livestock and those for whom the reverse had happened. The latter would seem to have been

Principal Advantages and Disadvantages of Farming on Enclosed
Farms given by Peasants Interviewed in Bogoroditskiy Uyezd (9)

	% Distribution of answers among:	
	khutor farmers	otrub farmers
Advantages enumerated as:		
Hereditary ownership gives confidence to invest work and capital into farm	10.2	19.7
Hereditary ownership ensures retention of land	-	0.8
Hereditary ownership ensures freedom of land conveyance	2.0	1.6
Hereditary ownership ensures freedom of decision-making	40.8	28.4
Land in a single place	6.1	18.1
Land near to farmyard	10.2	6.3
Economises in work time	6.1	0.8
Elimination of boundary ditches	-	3.2
Helps to eliminate weeds	-	2.4
Land of good quality	-	0.8
Improved relations with neighbours	8.2	-
Can build where and as wants to	-	4.7
Good for livestock husbandry	16.2	13.2
Total	100.0	100.0
Disadvantages enumerated as:		
Unclear legal rights to land	-	10.8
Difficult to maintain livestock	42.9	36.0
Difficult for poor households	3.6	-
Land too far away	-	1.3
Land not in one place	4.7	-
Land all of poor quality	4.7	26.7
No access roads	4.7	2.3
No water on farm	4.7	4.6
Worsened relations with neighbours	-	1.3
Enclosed against wishes	3.6	-
Discontented with the retention of common pastureland	-	1.3
Social disadvantages: too far from school, church, etc.	9.7	6.2
Short of land	3.6	5.8
No help from agricultural bodies	-	1.3
Financial difficulties	17.8	2.4
Total	100.0	100.0

in the majority. Another important disadvantage, experienced mainly by the peasants on khutors, was the expense involved in enclosure; as already noted, the costs accruing to peasants who purchased enclosed farms were considerable and some peasants considered them too great. It is interesting that among the disadvantages noted, those directly related to the way in which enclosure had been carried out ranked high; the peasants complained of problems arising through there being no roads or no water on their farms and through their land allotment not being fully consolidated or too far away. 'Social disadvantages' (the distance from schools, the church and neighbours), which might have been expected to have caused concern, seemed to have troubled the peasants comparatively little. It could be argued that all the problems noted by the enclosed farmers were, with the possible exceptions of the difficulty of maintaining livestock, either temporary in nature or relatively easily solved, but evidently for over one-third of the peasants they were sufficiently severe for the peasant to have come to the conclusion that enclosure had been a mistake and for another nearly 20% to be distinctly lukewarm in their appraisal of the change.

VII - 9. State Agricultural Aid Programmes for Peasant Farms in Tula Province

As in Tver, a number of private and state agencies were established in Tula Province from the latter decades of the nineteenth century onwards whose function it was to disseminate among the peasants knowledge of the latest developments in farming and also render them material assistance. If the activities of such agencies can be said to have had only limited success in Tver, those in Tula met with failure on nearly all fronts; the problems of peasant farming in Tula were considerably greater than in Tver but the agencies established to help alleviate them were less numerous, less active and had fewer resources.

An agricultural commission was, in fact, established in Tula as early as 1886 in order to investigate the state of peasant farming, but it was not until the mid 1890's that the zemstvo began to organise an agricultural aid programme. During the first years it concentrated almost exclusively on assisting the peasants in the purchase of modern farm implements and machinery, allocating 5,000 rubles for the establishment of a machinery warehouse in the Provincial capital. This was followed by further grants for the establishment of similar warehouses

in the uyezd towns (nine had one warehouse by 1901). The peasants' response was, however, weak, and between 1895 and 1899 the warehouses sold only one hundred and thirteen modern ploughs to peasants in the whole Province (32). In 1902 it was decided to widen the scope of the zemstvo agricultural section to embrace all aspects of farming. Agricultural advisors were directed to individual villages in order to assist in the introduction of various improvements. Their main achievement, so it was reported in Tul'skaya Sel'skaya Gazeta (The Tula Rural Gazette), was in the sphere of clover cultivation, experimental and permanent sowings being introduced into three hundred and fifty nine villages of the Province by 1909. The majority of these, however, were located in the non-black-earth uyezds in the north, where livestock farming was developing rapidly and where the need for extending the area under ley grasses was more immediately obvious to the peasants than in the southern grain producing uyezds (33).

Although the peasant farmers who enclosed their land were drawn from communes in which the system of farming was primitive and who could not be expected to be familiar with up-to-date methods and techniques, it was not until the spring of 1910 that the Land Settlement Committee in Tula established its own agricultural section to cater for the specific needs of the enclosed farms. Before 1910, apart from receiving loans for basic land reclamation, the digging of wells and the removal of buildings, the enclosed farms had to depend upon the services of the zemstvo. The zemstvo, however, relegated them to a position of secondary importance behind farms in the commune, arguing that its resources were better utilised working with a group of peasants rather than with individuals. Between 1902 and 1908, for example, the zemstvo was able to introduce ley grass cultivation on to 3,787 peasant farms simply by concentrating its attention on one hundred and three communes. During the same period, it had to undertake three hundred and seventy nine separate projects to introduce ley grasses on to individual khutors and otrubs, "Knowledge of improved agricultural practices is beginning to penetrate into the masses" it was reported in 1910, "and is being assimilated and applied in communes by ten times as many households as among individual ones" (34).

The transfer of responsibility for the enclosed farms from the zemstvo to the Land Settlement Committee was due to the belated realisation that an improvement in the standard of farming was by no means the inevitable corollary of enclosure. After 1910, the khutors

and otrubs in Tula, as in Tver, became the principal recipients of agricultural aid and Mozzhukhin acknowledged that this was "an important factor" (35) in the progress that was observed on some of the enclosed farms in Bogoroditskiy uyezd. The number of farms that took advantage of the services provided was, however, small - between 1910 and 1912 only 10 - 20% of the total in the Province.

During the first year of its existence the agricultural office of the Land Settlement Committee was concerned primarily with formulating its plan of operation and the preparatory work needed for its implementation. Of first priority was the appointment of sufficient qualified personnel and, as in Tver, it was considered desirable that no more than 2,000 farms should be under the authority of one agricultural specialist. Hence, between 1910 and 1912, ten chief agronomists were appointed, twenty farm advisors and ten probationers in Tula and, although the majority was concentrated in the uyezds with the maximum enclosure, it is evident that there was a marked variation from one uyezd to the next in the ratio of personnel to enclosed farms. The programme of aid was very comprehensive but the agricultural office gave priority to the introduction, "of the simplest type of measures which (would) yield the quickest possible returns" (37). The introduction of multiple-field rotations was, for example, considered to be of less immediate importance than the construction of fences and the establishment of shelter belts to protect crops from the weather and roaming livestock, the improvement of natural haylands and better use of fertilisers. Moreover, attention was focused on those areas in which there were clusters of enclosed farms so that the results of any single project would become known to the maximum number of peasant farms, thus accelerating the diffusion process (Figure 33).

The principal method employed by the agronomists to familiarise the peasants with the advantages of using improved seeds, new crops, artificial fertilisers and better methods of working the soil was the establishment of demonstration parcels, $\frac{1}{4}$ - 1 desyatina in size, on the land of existing enclosed farms. Particular emphasis was placed on the introduction of improved strains of the main crops. Nearly half of all the demonstration parcels in the Province were under oats, rye and potatoes. On the remainder, new crops (mangel wurzel, lucerne, vetch, clover, peas), with which the peasants were unfamiliar, were grown. The usual practice was for the Land Settlement Committee to give the seeds free to the individual farms on condition that they distributed



- | | |
|--|-------------------|
| ■ Machinery hire station | ● Uyezd town |
| ▼ Livestock breeding station | ● Volost town |
| □ Seed cleaning station | — Uyezd boundary |
| △ Agricultural office | — Volost boundary |
| ○ Machinery warehouse | |
| ◆ Agricultural cooperative | |
| ▲ Agricultural procurement cooperative | |
| ▽ Agricultural credit society | |
| ▨ Group of enclosed farms | |

Fig 33- Yepifanskiy uyezd - Distribution of enclosed farms investigated in 1913 & G.U.Z.i.Z. agricultural aid stations

some the following year to their neighbours. In addition, during the winter, readings and lectures were conducted in areas where such demonstration parcels had been established in order to "consolidate the results" (38). During the first two years of its operation, the Land Settlement Committee's agricultural section established demonstration parcels for crops on 10% of the enclosed farms in the Province and for artificial fertilisers on 0.6%. The Committee did note in its report of 1912 that in some areas the impact of the demonstration parcels on neighbouring enclosed farms was less than had been expected because different soil conditions and the absence of control plots made comparisons between farms difficult. Nevertheless, it was confident that in the long run these demonstration parcels would make their influence felt and the transition would be made from the experimental stage to the incorporation of the improvements on farms as normal practice. Already it noted forty five enclosed farms (0.4% of the total) had substituted improved hybrid types for local grains, with a consequent increase in yields.

The introduction of the use of machines and modern tools was considered to be an important component of the agricultural aid programme and between 1906 and 1912 the Committee established twenty two machinery lending stations in centres of khutors and otrubs clusters in the Province. The use of machinery was demonstrated by the farm advisors actually at the stations and then the machines were lent to individual peasants free of charge. By 1912, however, there had been only 1,484 instances of hire by peasants on enclosed farms (11.8% of the enclosed farms). Usually associated with machinery lending stations were seed-cleaning depots to which the peasants could bring their seeds, before sowing, to be sorted and cleaned, but again the percentage of farms that actually had used the service by 1912 was relatively small. Where livestock were concerned attention was focused on improving the quality of cattle in the Province through controlled breeding. Nineteen breeding stations were established, stocked with pedigree Swedish bulls. Usually the bulls were maintained by individual farmers who were paid 100 rubles per annum for their upkeep by the Land Settlement Committee.

Clearly the agricultural office of the Land Settlement Committee in Tula was by 1912 moving in the right direction in its programme of assistance to the enclosed farms. But, its work was in an embryonic stage of development and its impact on the type of farming system practised on the enclosed farms very limited.

NOTES TO CHAPTER VII

1. Trudy Mestnykh Komitetov ..., op.cit., TomXLIII, 1904, p.177.
2. Mozzhukhin, op.cit.
3. Zemleustroyennyye Khozyaystva ..., op.cit.
4. Mozzhukhin, op.cit., p.176.
5. Krest'yanskoye Khozyaystvo po Perepisyami 1899 - 1911.
Yepifanskiy Uyezd, Tul'skoye Gubernskoye Zemstvo. Otsenochno - Statisticheskii Otdel. Tula 1916.
6. Zemleustroystvo i Zemlepol'zovaniye, G.U.Z.i.Z., St. Petersburg.
Issues: No.9 (August, 1909), No. 10 (September, 1909) and
No. 13 (September, 1919).
7. Materialy dlya Otsenki Zemel' Tul'skoy Gubernii, Tul'skoye
Gubernskoye Zemstvo. Otsenochno - Statisticheskii Otdel. Tom III.
Yepifanskiy Uyezd and Tom IV. Bogoroditskiy Uyezd. Tula, 1911.
8. Mozzhukhin, op.cit., p.156.
9. Ibid., p.156.
10. Itogi Otsenochno-Ekonomicheskogo Issledovaniya Tul'skoy Gubernii...
op.cit., (1903), Yepifanskiy Uyezd. Description of the use of the
usadba in the commune, p.p. 307.
11. This, of course, is a somewhat over-generalised statement of the
use to which the peasants put the grain they cultivated after
harvest: some winter rye entered the market and a portion of the
harvest of spring oats was retained on the farms for domestic use.
It is nevertheless true that a proportionately greater share of the
harvest of winter rye was retained on peasant farms than of oats
and that spring oats constituted the principal commercial crop
produced.

12. Krest'yanskoye Khozyaystvo po Perepisyami..... op.cit., p.107.
13. The Russian populists or narodniks ancestors of the Social Revolutionaries of the early 1900's emphasised the virtues of the Russian peasants in true Slavophile form but especially they romanticised the rural commune seeing in it the germ of true socialism. Khryashcheva's thesis, like that of better known Chayanov, was that through a natural process of the growth and division of peasant families, and aided by the practice of repartitioning, equality between individual households in the commune was in the long run maintained.
14. Obzor Materialov po Opisaniyu Khutorskikh Khozyaystv po Tul'skoy Gubernii; In Zemleustroystvo i Zemlepol'zovaniye, G.U.Z.i.Z., St. Petersburg, 25th September, 1909. No.13, p.4.
15. Ibid., p.4.
16. Mozzhukhin, op.cit., p.p.243 and 248.
17. Obzor Materialov po Opisaniyu op.cit., p.7.
18. Ibid., p.7-8.
19. Materiali dlya Otsenki Zemel' Tul'skoy Gubernii , op.cit., Tom III. Yepifanskiy Uyezd, p.37.
20. Cited from Mozzhukhin, op.cit., p.p.248 - 250.
21. Zemleustroystvo i Zemlepol'sovaniye, op.cit., No.10, 4th September 1909.
22. Pryanishnikov Professor, Chastnoye Zemledeliye, Moscow 1910, p.219
23. Mozzhukhin, op.cit., p.237.
24. Dubrovskiy, op.cit., p.285.

25. Ibid., p.285.
26. Mozzhukhin, op.cit., p.235.
27. Mozzhukhin, op.cit., p.237.
28. Obzor Materialov po Opisaniyu op.cit., p.8.
29. Kratkiy Obzor Meropriyatii po Agronomicheskoy Pomoshchi Khozyaystvam Yedinoличnykh Vladenii v Tul'skoy Gubernii, Tul'skaya Gubernskaya Zemleustroyennaya Kommissiya. Tula, 1912.
30. Krest'yanskoye Khozyaystvo po Perepisyami, op.cit., p.258.
31. Mozzhukhin, op.cit., p.258.
32. Trudy Mestnykh Komitetov, Tom XLIII, p.186. For the early history of the agricultural aid programme in Tula see: Trudy S'ezda Deyateley Agronomicheskoy Pomoshchi Mestnomy Khozyaystvu....., op.cit.
33. Trubin, A., Agricul'turnyy Progress v Obshchine; In Tul'skaya Sel'skaya Gazeta, No.2., 1908.
34. Ibid.
35. Mozzhukhin, op.cit., p.261.
36. Calculated from figures taken from Kratkiy Obzor Meropriyatii...., op.cit.
37. Kratkiy Obzor Meropriyatii....., op.cit., p.2.
38. Ibid., p.3.

CHAPTER VIII

ENCLOSURE AND AGRICULTURAL PROGRESS - THE CASE OF SAMARA PROVINCE

At the beginning of the twentieth century peasant farming in Samara Province was among the most commercially orientated in the whole of European Russia; along with their counterparts in the rest of the eastern and southern steppe, peasant farmers in the Province had increasingly come under the influence of the expanding domestic and overseas trade in grain and had begun to produce almost exclusively for the market. They had many advantages in developing their economy over similar peasants elsewhere. In the first place, the natural environment and particularly the soils and hot, sunny summer, were on the whole favourable for the production of grain. Secondly, the majority of farmers were well endowed with land compared with in other parts of Russia, although the landshort did exist. And Thirdly, and perhaps most importantly, the peasant farmers were comparatively little troubled by restrictions on their activities by the rural commune - even before the introduction of the Stolypin Reform, peasant farmers in Samara had a relatively large degree of decision-making autonomy. Perhaps at the opposite end of the spectrum of Tula, Samara was included by contemporary specialists in the group of provinces in which capitalism was most developed in agriculture and this was reflected in the relatively widespread ownership of modern farm machinery and implements and in the small percentage of farms that had neither horse nor cow (p.p.96-100).

Despite the advantages that the Province would seem to have possessed, the standard of peasant farming in Samara was not high. Grain was cultivated on peasant farms under extensive systems - variations on the long-fallow system in the southern uyezds and the three-field system in the northern uyezds - and the problems of fodder shortages for livestock, inadequate manure for the land and consequent low yields were no less severe than in Tver and Tula. The normal problems associated with the use of extensive systems of farming were, however, compounded in Samara by the tendency of the climate towards extreme summer droughts

which could destroy whole harvests and put the economy of the peasant farms at risk. In order to stabilise the peasant farming economy in the Province, radical changes needed to be introduced into the existing system of farming, changes that would simultaneously increase the productivity of the soil and reduce the effect of drought. Most of the contemporary agronomists working in Samara agreed that this could only be achieved through the diversification of production and the introduction of intensive methods. It is important to enumerate at this stage the measures that were recommended for they differed in detail from the recommendations for Tula and Tver; they were:

- reduction of the sown area under spring grains
- substitution of the long-fallow or three-field systems by multiple-field rotations incorporating the cultivation of ley grasses, such as sorghums, lucerne and vetch suited to the arid conditions of the Province
- introduction of intertillage (propashnyye) crops, such as sunflowers, potatoes, sugar beet, maize and carrots which had a longer growing season than spring wheat and could therefore take full advantage of the July, August and September rainfalls
- increased use of manure and artificial fertilisers
- early ploughing of fallow
- use of agricultural machinery and particularly seed-drills and seed-sorters
- expansion of livestock husbandry
- construction of irrigation networks in the southern driest parts (1)

Many obstacles were encountered in the attempt to introduce such changes. The proponents of the Stolypin Reform argued that the principal of these was the limitation imposed on the peasants by the communal system of tenure. There is, however, substantial evidence to suggest that if this was a factor, it was relatively insignificant. The present chapter will attempt to show that a far greater obstacle to change was the vested interests of the peasants in producing the maximum possible amount of grain annually. As in Tula, this led to the retention on enclosed and non-enclosed farms alike of the existing extensive systems.

VIII - 1. The Enclosed Farms Investigated in Samara Province: Sources of Information

The enclosed farms in Samara Province had very varied origins. As was described in Chapter III, some came into being as a result of the settlement of migrant farmers by the Ministry of State Properties on crown and appanage land in the 1840's, 1880's and 1890's, others as a result of the purchase or rent of consolidated land parcels at various times during the nineteenth century and yet others as a result of the redistribution of allotment land under the provisions of the Stolypin Legislation. These farms, although having many features in common, often differed from one another in respect of the spatial organisation of their land. At the one extreme there were the hereditary family holdings on which land was laid out in long narrow strips abutting on to the farmyard, while at the other there were the otrubs formed after 1906 on which the arable, often approaching a perfect square in shape, was laid out at a considerable distance from the farmyard.

Each typological group of enclosed farms has been examined separately in order to determine the influence exerted on the system of farming practised, first, by the length of time the enclosed farm had been in existence and, secondly, by the circumstances of their origin. Also some consideration is given to the question of the extent, if at all, to which farming was affected by the way in which the land on the enclosed farms was laid out.

Three principal sources of material have been used, each of which contains information about a specific type or types of farm. The first, and most useful source, is the published report and census of three hundred individual enclosed farms of diverse origin and location compiled by the Samara Provincial zemstvo in 1909 under the direction of D.Ya.Slobodchikov (2). For each of the farms included in this investigation data are available relating to land use, the number of livestock owned, farm machinery and size of household. Detailed information about various aspects of farming, such as the dates of ploughing, rotations, yields, etc., is available for some but, unfortunately, not all the farms. The second source of information is the G.U.Z.i.Z. investigation of 1913 covering the khutors and otrubs formed on allotment and purchased land in Nikolayevskiy uyezd (3). All the enclosed farms formed three years prior to the investigation were included in the survey - more than two thousand in all. The third source are the household censuses of

Samarskiy uyezd enumerated in 1883 and 1911, which contain data on certain types of enclosed farms, namely the hereditary family holdings and the farms belonging to the Mennonite colonists formed in the 1850's in the uyezd. The data are presented by whole village and not by individual farm (4).

The farms have been divided into the following groups for the purpose of discussion:

1. Enclosed farms formed prior to the Stolypin Reform as a result of Central or Local Government programmes:
 - 1a. The hereditary family holdings (Samarskiy uyezd)
 - 1b. The enclosed farms belonging to Mennonite Colonists (Samarskiy uyezd)
 - 1c. The enclosed farms formed on rented Appanage land (Nikolayevskiy uyezd)
2. Enclosed farms formed prior to 1906 as a result of the grass-roots initiative of the peasants themselves (Samarskiy and Novouzenskiy uezds)
3. Khutors and otrubs formed after 1906 as a result of the Stolypin Land Reform (Nikolayevskiy uyezd).

VIII - 2. Hereditary Tenure: its Influence on the Evolution of Peasant Farms

In Chapter V the size and resource endowment of the enclosed farms in the three Provinces at the time of formation of the farms was considered. It is equally important to investigate the fate of these farms - what proportion remained the same size as they had been at the time of enclosure, what proportion grew, what proportion shrunk in size and what proportion was liquidated (this is one measure of the economic changes that took place among the enclosed farms as group). Unfortunately, absence of relevant data makes such an exercise impossible for the enclosed farms formed after 1906 and, in any case, it is unlikely that during the short period leading up to the Revolution any but minor changes took place; it is possible, however, for the farms that were enclosed early in the nineteenth century. Data exist which allow the changes in the size of the hereditary family holdings and Mennonite farms to be traced over a period of half a century in Samara Province. The main trends in the evolution of peasant farms in hereditary tenure can thus be identified and contrasted with the trends in the commune.

As already noted (p.148), the hereditary family holdings formed in 1848 became progressively more fragmented during the course of the nineteenth century as a result of the practice of gavelkind, so that by the 1900's in respect of the distribution of their land, they resembled peasant farms in the commune. This process of fragmentation was inevitably accompanied by a decline in the average size of the farms: at the time of their formation all the farms were 38 desyatinas in size but in 1910 the majority was only half this size - under 15 desyatinas:

Table 97

The Distribution of Hereditary Family Holdings by Size in
Samarskiy Uyezd, 1848 and 1909 (11)

Size of farm (in desyatinas)	% number farms in each size group	
	1848	1909
<5	-	13.2
5 - 10	-	29.9
10 - 15	-	17.9
15 - 20	-	17.8
20 - 25	-	5.7
25 - 30	-) 15.6
30 - 40	100.0	
>40	-	
Total	100.0	100.0

Moreover, a substantial number, according to zemstvo, had joined the ranks of the landshort.

(see Table 98 overleaf)

Table 98

Percentage Number of Hereditary Family Holdings on which there was a Shortage of Land in 4 Volosts of Samarskiy Uyezd, 1909 (11)

Volost	% number of farms on which there was relative to population	
	a shortage of land	a surplus of land
Petropavlovskiy	42.0	58.0
Staro-Dvoryanskiy	56.1	43.9
Staro-Buyanskiy	53.7	46.3
Kandabulskiy	51.0	49.0

Certainly in 1909 few of the hereditary family holdings were the same size, let alone larger, than they had been in 1848.

Although sub-division on inheritance led to a universal decline in the size of hereditary family holdings, on some this decline was offset by the purchase and rent of additional land. In 1910 over half the land in the use of the farms was either purchased or rented and the proportion of such, apparently increased in direct relation to the increase in the size of farm (5). By the twentieth century the picture presented by the hereditary family holdings was thus very different from what it had been five decades earlier. In 1848 all the farms had been the same size and their man/land ratios roughly similar. In 1910, in contrast, the size of the farms varied enormously - they were on average smaller than they had been earlier, but the differences between them had widened, the large better endowed with land relative to the head of population than were their smaller counterparts.

The progressive decline in size and the differentiation that evidently took place among the hereditary family holdings during the second half of the nineteenth century was similar in many respects to the process taking place over the same period of time in the commune. By virtue of the fact that they were in hereditary rather than communal tenure, the process operating among the former was, however, somewhat more pronounced. In the commune the practice of repartitioning, although

operating imperfectly, did at least 'dampen' the differences between households in the amount of land they held, while at the same time it ensured that no peasant household was left entirely without land. Moreover, since it was impossible for peasants in the commune to dispose of their land allotments on the market until the law was changed in 1906, relatively few of the land short liquidated their holdings. Among the hereditary family holdings there was no mechanism which was designed, even notionally, to retain equality between households, nor was there any restriction on the sale of whole farms by the peasants. This latter, especially, had a noticeable affect, for it meant that households could liquidate their farms once they became too small and uneconomic. As they joined the landshort there was, therefore, a tendency among the hereditary family holdings for farms to be sold and for the peasants to move elsewhere - either to the towns or in search of cheaper land further east. As early as 1883, the Samarskiy uyezd census reported that: "In Petropavlovskiy and Krasnodomskiy volosts where hereditary tenure is dominant, the complete loss of land by the weakest households is taking place at a remarkable speed" (6).

Among the Mennonite farms a similar process of increasing differentiation and the loss of the weakest households would appear to have taken place during the second half of the nineteenth century. However, as a result of the peculiar inheritance customs of the farmers (p.153) the changes that actually took place tended to differ in detail from those among the hereditary family holdings. Perhaps the greatest difference was that, whereas over time the hereditary family farms (and, indeed, farms in the commune) declined in size, the average size of the Mennonite farms increased. In Samarskiy uyezd, as one example, the Mennonite farms increased in size from an average of 65 desyatinas in 1858 to 98.8 in 1909. This increase took place not as a result of the purchase of land from outside the Mennonite koloniyas - between 1858 and 1909 the total amount of land in the ownership of the Mennonites remained the same - but as a result of the operation of a process of 'natural selection' among the Mennonite farms themselves. Between 1858 and 1909 one half of the households in the koloniyas of Samarskiy uyezd were forced, because of economic difficulties, to liquidate their holdings. (See Table 99 overleaf)

Table 99

Number of Mennonite Farms in Samarskiy Uyezd, 1850's - 1909

	Year		
	1850's	1887 (6)	1909 (11)
Number of farms	178	127	89

The land thus released was purchased by the households with sufficient capital remaining the koloniyas. "The Mennonite farms", it was reported in the Samarskiy uyezd census for 1883, "are losing their stability ... the small farms are declining numerically and are being absorbed by the group of larger landowners who are concentrating in their hands more and more land" (7). The system of non-partible inheritance practised by the Mennonites undoubtedly accelerated these changes and, in part, was the cause.

Examination of Table 100 overleaf, which shows the size distribution of Mennonite farms in Aleksandratal'skiy volost in 1883 and 1909, confirms that the process of economic differentiation took place very rapidly during the second half of the nineteenth century. At the time of their formation in the late 1850's the Mennonite farms, with few exceptions, were 65 desyatinas in size. By the end of a thirty year period nearly one half were either smaller or larger than they had been originally. The trend continued during the next twenty years, the farms which between the 1850's and 1887 had begun to lose land continued to do so and vice versa, so that by 1909 approximately 40% of the farms had over 100 desyatinas of land. Meanwhile, it would appear that some of the smallest farms from the earlier period had by the twentieth century disappeared altogether.

Evidently marked changes took place among the hereditary family holdings and Mennonite farms in Samarskiy uyezd during the period of their existence; for whatever reasons some would appear to have prospered and expanded, while others must have experienced considerable economic difficulties and were forced to sell off part of their land and were finally liquidated. Undoubtedly the difference in the inheritance customs between the two groups of farms was responsible for the fact that, on the one hand, among the hereditary family holdings there was an overall decline in farm size and that, on the other, among

the Mennonite farms there was an overall increase. Nevertheless, within these two broad trends there was a tendency for the strong to survive and the weak rapidly to be eliminated. It is important to bear this in mind when examining the system of farming on the hereditary family holdings and on the Mennonite farms; those that survived into the twentieth century were for the most part, the most successful of all those originally formed forty or fifty years previously. The pattern of change of the enclosed farms formed after 1906, so long as no amendments were introduced into the laws of inheritance, would in all probability have been very similar to that of the hereditary family holdings. Whatever the inheritance laws, however, it could reasonably be assumed that simply by virtue of the transfer from communal to hereditary tenure the process of economic differentiation would have operated more quickly among 'Stolypin's' khutors and otrubs than among farms remaining in the commune.

Table 100

The Distribution of Mennonite Farms by Size in Aleksandratal'skiy
Volost, Samarskiy Uyezd, 1850 - 1909

Size of farm (in desyatinas)	% number of farms in each size group in		
	1850's	1887 (6)	1909 (11)
<10.0		7.0	-
10.01 - 32.0		12.3	6.2
32.01 - 64.0	100.0	25.4	35.9
64.01 - 100.0		22.8	12.5
100.01 - 200.0		29.8	29.7
>200.0		2.6	10.7
Total	100.0	100.0	100.0

VIII - 3. Aspects of Farming and the Farming Economy of the Enclosed Farms Formed as a Result of Central Government Programmes Prior to 1906 (1)

Partly because the number of farms involved was smaller and partly because the aim, where all the programmes were concerned, was to create 'model' farms, the Government tended to make somewhat greater efforts to ensure that conditions for the development of a rational and modern system of farming were optimal on the enclosed farms it introduced during the course of the nineteenth century than was the case with the 'Stolypin' khutors and otrubs. Already it has been noted (Ch.III-4a) that care was taken allocating farms to the peasant migrants - whether from central Russia or from Prussia-to make sure, first, that each household had sufficient land on which to support itself, secondly, that on each farm there was adequate hay, pastureland and wood and that these were all reasonably accessible, and thirdly, that on each farm there was a supply of water and good intra-farm communications. In addition, the grants made available to the new farms for the acquisition of livestock and farm implements were by later standards very generous.

The measures taken by the Government where the early enclosed farms were concerned, however, went further than merely guaranteeing that each household had sufficient land and capital to farm efficiently. Steps were also taken to ensure that every household on the family hereditary holdings and enclosed farms on appanage land introduced on to its farm the system of farming that was judged at the time to be most rational for the conditions of the Province. This was done partly through the fields being laid out in such a way as to make the adoption of one or other type of rotation inevitable and partly through the peasants being forced to agree, in law, to introduce a particular system on to their land, the penalty for not conforming being the surrender of the farm. While thereby curbing the decision-making autonomy of the households concerned and thus violating one of the principles of the later enclosure programme, the Government was, it can be argued, acting in a highly rational manner; it was dealing with peasant households who were unfamiliar with any alternatives to the traditional three-field system and who, moreover, had no experience of farming in arid conditions. The danger was that the peasants, unless

directed otherwise, would begin to farm their enclosed farms in the same way as they had farmed in the commune and this was a danger that the Government of the day was sensible enough to recognise. At the time of their formation, therefore, the early enclosed farms in Samara Province had considerable potential for development. As it transpired, however, despite the initial care taken, this potential was realised on only a minority of the farms, a circumstance that should have served as a warning to the reformers of 1906.

VIII- 3a. Aspects of Farming and the Farming Economy on the Hereditary Family Holdings in Samarskiy Uyezd (1a)

One of the conditions laid down by the Ministry of State Properties in 1846 with its first serious attempt to introduce individualised farming into Samara was that every peasant household receiving a hereditary family holding should introduce on to his arable land the long-fallow system of cultivation: two of the eight fields laid out on each farm had to be sown to spring grains and the remainder left under fallow. Although this system was wasteful of land, it was the one known to agronomists in the early nineteenth century to be suited to the climatic and soil conditions in the Province. Already the majority of communes in the northern uyezds had moved from the long-fallow to the three-field system in response to pressure of population growth, and the effects of this in the form of low yields and declining soil fertility were beginning to make themselves felt. The Ministry of State Properties was attempting to avoid the same happening on its new farms but it was fighting a losing battle. Despite the fact that the hereditary family holdings initially had an abundance of land at their disposal, as time progressed they found that their resources were increasingly strained and that the output of grain available under the existing system was insufficient to meet their needs. At first the Ministry of State Properties attempted to meet this problem by allocating additional land - the secondary land allotments (p.146) - to the peasant households on the hereditary family holdings, but it was unable to keep up with the increase of population. Further, with the gradual increase in the price of grain it was faced with pressure on the part of the peasants to extend the area of their land sown each year in order to maximise their profit. The abandonment of the long-fallow

Land Use and Rotations in the Villages of Petropavlovskiy Volost
in Hereditary Family Tenure, 1909 (11)

NAME OF VILLAGE	Land organisation	Rotation practised	PRIMARY LAND ALLOTMENT					SECONDARY LAND ALLOTMENT				
			Distance of 1 ^o allotment of hay from village (vershs)	Use to which hayland put in 1909	Distance of 1 ^o allotment of wood from village (vershs)	Use to which woodland put in 1909	Distance of 2 ^o allotment from 1 ^o (vershs)	Has the 2 ^o allotment been settled?	Distance of 2 ^o allotment of hay from 2 ^o arable allotment (vershs)	Use to which 2 ^o allotment of hayland put in 1909	Distance of 2 ^o allotment of woodland from 2 ^o arable (vershs)	Use to which 2 ^o allotment of woodland put in 1909
Vvedenka	L	3-field	6.6	ploughed	2.6	ploughed	adjacent	No	6.6	hay	none	-
Ozerki	L	3-field	5.3	hay	adjacent	pasture	none	-	-	-	-	-
Vladimirovka	K	3-field	6.6	rent out	none	-	3.3	No	4.6	hay	2.0	wood
Rozhdestvenka	L	3-field	5.9	hay	2.6	ploughed	adjacent	No	5.9	hay	none	-
Rizhovka	L	3-field	2.0	ploughed	9.9	ploughed	none	-	-	-	-	-
Dmitriyevka	L	3-field	3.3	hay	9.9	ploughed	2.6	Yes	none	-	none	-
Preobrazhenka	L/ K	3-field	4.9	hay	4.6	rent out	none	-	-	-	-	-
Berezovka	L	3-field	2.6	hay	2.0	ploughed	adjacent	No	3.3	part- ploughed	2.6	ploughed
Mikhaylovka	L	3-field	adjacent	rent out	2.0	rent out	5.0	No	3.3	part- ploughed	2.6	ploughed
Svetlovka	L	3-field	9.9	hay	6.6	rent out	none	-	-	-	-	-
Kazachya	L	3-field	1.3	ploughed	2.0	ploughed	9.9	No	5.3	hay	adjacent	ploughed
Zabolotskaya	L	3-field	2.0	hay	0.7	ploughed	6.6	Yes	4.6	hay	6.6	ploughed
Visarionov	K	3-field	1.0	hay	adjacent	wood	none	-	-	-	-	-
Abdeyev	K	3-field	-	-	9.9	ploughed	none	-	-	-	-	-
Palnaya	L	3-field	adjacent	hay	4.0	ploughed	none	-	-	-	-	-
Znamenka	L	3-field	7.9	ploughed	5.3	rent out	adjacent	Yes	none	-	none	-
Brusovka	L	3-field	5.3	hay	adjacent	ploughed	none	-	-	-	-	-

L = Lenti
K = Karti

system thus became inevitable. Within two decades of the beginning of the experiment, the Ministry, unable to offer any alternative suggestions washed its hands of the hereditary family holdings and left the peasants to introduce whatever system of farming they wished on to their farms. Thereafter, the pattern of change on the farms was a mirror image of the pattern in the commune. The number of fields left under fallow each year was rapidly reduced and eventually the three-field system was adopted. By the twentieth century, as Table 101 overleaf shows, the three-field system was firmly established in all the villages of Petropavlovskiy volost in Samarskiy uyezd with two-thirds instead of the one-quarter of the arable being cultivated annually.

In order to increase the share of their land sown to grain, the households on the hereditary family holdings not only abandoned the long-fallow system but also converted much land formerly under hay and wood into arable. By 1909 the primary allotment of woodland had been ploughed up in no less than ten of the villages in Petropavlovskiy volost and hayland in five. Similarly, incursions had been made into the secondary allotments. Most of the arable thus formed was sown to grain, but in one village, Znamenka, the peasants had resown it with grass and in another, Preobrazhenka, they used it for the cultivation of market garden produce (Table 101).

The single most important crop cultivated on the hereditary family holdings was, predictably, spring wheat, followed by winter rye and spring oats. Melons, potatoes, peas, sunflowers, ley grasses and other progressive crops occupied only a minute portion of the sown area. Crop production on the farms involved certainly appeared in the twentieth century to be no more diversified than in communes in neighbouring volosts (see Table 102 overleaf).

The extension of the sown area under grain on the hereditary family holdings at the expense of hay, wood and pastureland and long-fallow inevitably meant that there was a decline in the number of livestock that could be supported by the peasants. In the mid-nineteenth century, commercial livestock husbandry, concentrating on the production of meat products, had been an important aspect of the farms' economy. By the twentieth century, this sort of production had almost ceased and livestock were now kept on the farms only to satisfy the domestic requirements of the dependant households and to pull the peasants' ploughs. In this respect again hereditary family holdings had come to resemble farms in the commune.

Table 102

Distribution of Crops on Hereditary Family Holdings in Petropavlovskiy
Volost and on Farms in the Commune in Neighbouring Volosts (11)

Volost	% sown land under:										
	winter rye	spring wheat	spring oats	other grains	pot- atoes	peas	melons	sunfl owers	gras- ses	others	
Petropavlovskiy	26.6	63.4	9.1	0.3	0.2	0.1	0.1	0.1	0.01	0.09	
Chistovskiy	36.6	53.5	7.7	0.8	0.5	0.1	-	0.3	-	0.5	
Lipovskiy	36.8	50.9	6.7	0.6	-	0.1	0.1	1.2	-	3.6	
Teneyevskiy	24.1	58.5	9.4	0.6	0.2	0.1	0.1	-	5.5	1.5	
Average for Samarskiy uyezd	27.2	60.6	7.1	0.7	0.3	0.1	0.3	0.5	0.3	2.9	

Compared with farms in the commune, however, the number of livestock kept on the family hereditary holdings was relatively high. In Petropavlovskiy volost, for example, there were fewer households without any horses or other working livestock than in other volosts of Samarskiy uyezd and, correspondingly, there were more with three or four head:

Table 103

Livestock on Hereditary Family Holdings in Petropavlovskiy Volost and on Farms in the Commune in Neighbouring volosts (11)

Volost	Per household number of:			
	horses	cows	sheep	pigs
Petropavlovskiy	2.6	1.6	1.5	0.7
Chistovskiy	2.1	1.4	3.2	0.5
Lipovskiy	1.9	1.4	3.3	0.4
Teneyevskiy	1.8	1.4	3.3	0.8
Av. for Samarskiy uyezd	2.1	1.4	4.1	0.5

Volost	% number households:				
	without a horse	with 1 horse	with 2 horses	with 3 horses	with 4 or more horses
Petropavlovskiy	7.5	15.9	31.4	24.6	20.6
Chistovskiy	11.1	24.6	33.7	18.9	11.8
Lipovskiy	9.8	30.0	36.3	16.3	7.6
Teneyevskiy	16.8	31.4	26.8	16.2	8.7
Av. for Samarskiy uyezd	17.8	23.5	25.5	15.8	17.4

(For a village by village breakdown see Appendix VII)

This presumably was a reflection of the fact that, as noted above there were proportionately more land-abundant households among the hereditary family holdings and fewer poor, landshort households. Nevertheless, livestock on the farms would appear to have had little or no commercial significance - the number of productive livestock relative to purely working livestock was low. The enumerators of the census in

Samarskiy uyezd noted that it was only on the largest holdings that there was a surplus of livestock products available for sale on the market and these constituted a minority of all (8).

Principally as a result of the limited number of livestock on their farms, the amount of land fertilised on the hereditary family holdings was low. These holdings apparently suffered from the same problems in maintaining livestock as farms in the commune and had begun to adopt the same measures to combat them, namely, communal grazing on fallow and on the stubble after harvest, which in its turn prevented the introduction of fodder crop production on the arable as well as early ploughing of the fallow and a host of other measures that could have increased the productivity of the soil.

The principal advantage that the hereditary family holdings would seem to have had over peasant farms in the commune was that they were better equipped with farm implements and machinery:

Table 104
Farm Implements and Machinery on Hereditary Family Holdings in
Petropavlovskiy Volost and on Farms in the Commune in
Neighbouring Volosts (6)

Volost	Per 100 farms number of:				
	harrows	ploughs	seed- drills	threshing harvesters	machines
Petropavlovskiy	250	90	3.5	20.6	5.5
Chistovskiy	200	80	1.9	7.3	4.4
Lipovskiy	180	60	0.3	1.4	1.9
Teneyevskiy	180	70	3.2	2.8	3.4
Kandabulskiy	220	70	3.1	3.8	5.0
Av. for Samarskiy uyezd	200	70	1.8	4.8	3.3

Not only were there more iron ploughs and harrows per farm in Petropavlovskiy volost than in neighbouring volosts but there were also more seed-drills, harvesting and threshing machines. The use of the latter especially must have resulted in substantial increases in the productivity of the land and labour on some of the farms.

The overall picture gained of farming on the hereditary family holdings at the beginning of the twentieth century was that it differed little from peasant farming in the commune. From being in the early nineteenth century in a position of considerable advantage, the hereditary family farms had gradually assumed many of the features characteristic of other peasant farms, so that by the twentieth century they were barely indistinguishable from them, not only in respect of the distribution of their land but also in respect of the system of farming that had been developed on them.

VIII - 3b. Aspects of farming and the Farming Economy on the Farms of the Mennonite Colonists in Samarskiy Uyezd (1b)

Although similar in concept, 'the Mennonite experiment' was considered, at the time, to have a greater chance of success than the experiment initiated two decades previously with hereditary family holdings. The Mennonites were reputed to be efficient and innovative farmers and, moreover, they were already accustomed to farming individually. The majority of Mennonites who arrived in Samara were relatively prosperous and brought from their homeland sufficient farm implements, many far more sophisticated than those of the Russian peasants, with which to equip their farms and also enough capital to purchase livestock and even hire labour. As the report of the 1883 Samarskiy uyezd census described, 'more than two-thirds of the families were wealthy, having made a fortune through thriftiness and tenacious work: one of the Mennonites brought with him 60,000 taler of capital, one-fifth from 10 - 15,000 and the remainder 2 - 6,000 taler' (9). Added to these advantages was the fact already noted that the inheritance customs of the Mennonites prevented the sub-division and fragmentation of the land as was common amongst Russian peasant farms, whether in hereditary or communal tenure.

Examination of the changes in the distribution of land use on the Mennonite farms in Samarskiy uyezd during the second half of the nineteenth century indicates that, just like their Russian neighbours, the Mennonites depended primarily upon arable farming for their livelihood. As was described in Chapter III, land on the Mennonite farms was laid out in a perfect square or rectangle cut by the village street into two unequal portions: the largest was initially designed to be devoted

to arable and the other to be left under natural hay and pastureland and also used as the kitchen garden. During the course of fifty years some of the non-arable land, particularly the hayland and kitchen garden, was evidently put under the plough, so that by 1909 on the majority of farms arable occupied over 80% of the total land area compared with the original three-quarters. By 1909, nearly one half of the Mennonite farms had no hayland at all and over one quarter no kitchen garden. The area of arable was considerably greater on the larger Mennonite farms than on the small:

Table 105

Land Use on the Mennonite Farms in Samarskiy Uyezd by Size (11)

Size of farm (in desyatinas)	% of total land in use under:			
	Usadba	Arable	Hayland	Pasture and wood
<30.0	3.5	79.3	-	12.2
30.01 - 50.0	3.1	80.5	-	16.4
50.01 - 100.0	1.1	86.3	3.8	8.8
>100.01	0.6	85.5	4.6	9.3

When they first arrived in the uyezd, the Mennonites cultivated only a small portion of their land, sowing it entirely to spring wheat, while the remainder was left under long-fallow. Within the course of five years, however, this system had been abandoned and replaced on all the farms by the three-field rotation with the cultivation of winter rye, spring oats and spelt and, from 1879 onwards small quantities of millet (10). With the further passage of time, there was a slight change in the emphasis placed on different crops but even after the turn of the century the three-field rotation remained dominant in all the koloniyas.

(See Table 106 overleaf).

Table 106

The Distribution of Crops on Mennonite Farms Compared with
Russian Peasant Farms in Samarskiy Uyezd (6)

Type of farm	Year	% of arable under:								
		winter rye	spring wheat	oats	minor grains	pot- atoes	peas	melons	sunf- lowers	gras ses
Mennonite	1883	28.6	35.7	28.6	7.0	-	-	-	-	-
Mennonite	1910	37.0	37.8	21.4	0.0	1.5	-	-	0.1	2.2
Russian peasant farms	1910	27.2	60.6	7.1	2.7	0.3		2.1		

There is no record in any of the very detailed reports on the zemstvo agricultural department of a four or multiple-field rotation having been adopted on a Mennonite farm. It is true that after 1900, sunflowers, potatoes and ley grasses began to be introduced, but for the most part they were simply incorporated into the three-field rotation or, in the case of the ley grasses, confined to small parcels of land outside the rotation. None of the other intertillage crops - beet, maize, carrots, peas, melons - nor any winter grains, other than rye, were cultivated in 1910 on Mennonite farms in Samarskiy uezd. "Among the deficiencies of Mennonite farms", the census enumerator wrote in 1883, "it is necessary to include the fact that the Mennonites carry out their farming in the most routine and traditional way, not trying to modernise it by introducing new rational methods of cultivation the Mennonites today, not reading anything, not going anywhere to observe alternatives farm in exactly the same way as their predecessors did when they first settled in Russia. At first, the Mennonites sowed flax and hemp on their land but now they have abandoned these crops; also gradually they are abandoning the cultivation of millet, because yields are low. The Mennonites, mainly through lack of knowledge, have not tried to find out the reason for the failure of these crops, nor have they tried to think up any new, better methods of growing them" (11).

Although the system of arable farming was much the same, the technique of working land on the Mennonite farms was far superior to that on Russian peasant farms. The Mennonites, for example, usually ploughed the fallow no less than three times before sowing - first in mid-May, then again in late May and finally in mid-June. Each time the

ploughing took place in different directions up the field, across or along the diagonal (12). In contrast, the Russians ploughed the fallow only once and, moreover, because the land was needed for livestock grazing, usually not until the end of June. Unlike their Russian neighbours, the Mennonites also ploughed the spring field in the early autumn and then harrowed it before planting in early spring. As a result it was reported in the census of 1883, "..... the fields (on Mennonite farms) are almost completely free of weeds and lumps and the air can freely circulate through the soil" (13).

Despite the thorough working of their land, the existence of the three-field rotation meant that from approximately the 1870's onwards the Mennonites were forced to start using fertilisers to prevent a decline in soil fertility on their farms. In this, though, they also demonstrated their superiority over the Russian peasants for, according to the 1883 census, "nowhere in the uyezd is the manuring of the land so widely practised as in the Mennonite koloniyas" (14). Furthermore, it was reported in the census that the Mennonites were able to economise on both time and effort in laying out the manure simply because their carts were larger than those of the Russian peasants: "unlike our Russian carts, the wide Mennonite carts are able to carry as much as 85 puds of manure at a time and they only have to be pulled by three to four horses" (15). Twenty years later, the investigators of the Witte Commission found that, whereas the Russian peasants applied on average 5 - 15 puds of manure to each desyatina of fallow, the Mennonites applied 80 - 90 puds (16).

In addition to practising a more satisfactory ploughing regime and using more manure on their fields, the Mennonites had more and better farm implements than did the majority of Russian peasants. By 1909, the double share plough, which, because it was heavy, ploughed the land more deeply and efficiently than did the single share, was already widespread on the Mennonite farms, especially on those over 50 desyatinas in size: (see Table 107 overleaf). It is not surprising therefore, that in a single day while the Russian peasants were able to plough only one half a desyatina of land to an average depth of 3.5 - 5.25 inches, the Mennonites were able to plough three-quarters of a desyatina to a depth of 5.25 - 7.0 inches (17). Similarly, the Mennonite harrows, as described in the 1883 census report were "of a much better quality and more efficient than the Russians: they have 32-36 stout iron

teeth which increase their (the harrows') weight, and not infrequently these harrows are pulled over the fields by two horses no less than four or five times" (18). Seed drills, harvesting and threshing machines while found on only one or two Russian farms in every hundred had by 1909 been purchased by over two-thirds of the Mennonite farmers. Even the expensive 'regulated' seed drill (Ryadovaya seyalka) which planted seeds in neat evenly-spaced rows was in use over one quarter of the Mennonite farms. There was, however, a considerable difference between these farms in the number and type of farm implements and machines owned, the small farms being poorly equipped compared with their larger counterparts (see Appendix VIII): Four peasants - Penner, Izak, Ekk and Runk for example, of whom all had holdings of under 30 desyatinas had between them only four ploughs and one threshing machine. But it is important to note that even some of the large farms were also poorly equipped - that of E. Gertz being a case in point. With 85 desyatinas of arable land, E. Gertz owned only a threshing machine and no plough, harvester or seed drill. The practice of lending farm machinery to one another must have been common among the Mennonites - one quarter of the farms, including a considerable number of those with over 50 desyatinas of arable land, had no ploughs at all - but the nature of the lending agreements is unknown.

Because of careful soil management and the use of sophisticated farm machinery, yields on Mennonite farms were, despite the three-field rotation, relatively high and were certainly consistently higher than on the Russian peasant farms. This, coupled with the fact that their man/land ratios were more favourable, meant that the Mennonite farms produced far greater surpluses of grain than did the majority of other farms. Furthermore, unlike the Russians, the Mennonites held on to their surpluses until prices reached their highest point on the market. The 1883 census report says, "whilst the peasants urged on by want and the desire to pay off their taxes and debts as quickly as possible sell grain in the autumn, consequently at the time when prices are their lowest, the Mennonites store it in their barns until grain prices rise so that from the sale they are not only able to cover the costs of production but also make some profit on their capital expenditure" (14). On many of the largest Mennonite farms profits were so great that one owner was able to hire sufficient labour to be able to cease participating in farm work himself (20).

One further distinguishing feature of the Mennonite farms was that, compared with the Russian peasant farms, they were very well stocked with both productive and working livestock. Not only did they have on average a larger number of livestock because of their larger size, but the number was higher relative to the amount of land. Given the same land resource base, the farms were able to support a greater number of livestock than were their Russian neighbours:

Table 108
Livestock on the Mennonite and Russian Peasant Farms in Samarskiy
Uyezd

Type and size of farm (in desyatinas)	Per farm head of:			
	cattle	sheep	pigs	horses
MENNONITE FARMS (11)				
<30.0	6.2	1.0	3.8	4.1
30.01 - 50.0	6.0	1.6	2.4	4.5
50.01 - 100.0	9.3	1.9	3.2	9.0
>100.01	12.1	1.9	4.2	22.6
RUSSIAN PEASANT FARMS (6)	1.4	4.1	0.5	2.1

In view of the fact that the arable had been extended at the expense of other types of land on the Mennonite farms, this is perhaps surprising. It must not be forgotten, however, that in spite of the expansion of the arable, both hayland and pastureland were still relatively more abundant in many of the Mennonite koloniyas than in the Russian communes; their quality and productivity were often considerably higher - the Mennonites not infrequently fertilised their hayland and ploughed and resowed their permanent pasture with grass - and ley grass and potato cultivation were more widespread. Furthermore, even if they did have a deficit, the Mennonites could afford more easily to purchase fodder than could the majority of Russian peasants, but in winter even the Mennonites were forced to feed their livestock primarily on straw and chaff, keeping the hay exclusively for the horses during the period of ploughing and for cows in milk. Despite this shortage of good quality fodder in the winter months, the Mennonites' livestock were

nevertheless better fed and hence larger, stronger and more productive than the Russians' - and they were better cared for. On all the Mennonite farms the livestock shed, which lay adjacent and connected to the living quarters of the peasant family, was kept warm throughout the winter months and was frequently mucked out (21).

The productive livestock, although initially being kept only for domestic purposes, had already by the 1880's acquired some commercial significance. "The Mennonites", a zemstvo agronomist reported, "keep cows for dairy farming, which they carry out so successfully that, having met the demands of their families, they have enough dairy produce left over to sell at the nearest market in Koshki" (22). With the passage of time, dairy farming expanded on the Mennonite farms so that by the turn of the century it was well established as a major source of income. By 1910, the number of dairy cows actually exceeded the number of horses on many farms, cheese-making factories had been established in three of the koloniyas and commercial pig farming was beginning to be developed on a minority of the farms (23).

The Mennonites were clearly more successful farmers than were their Russian neighbours. "It is true", the investigators from the Witte Commission reported in 1902, "that the majority still carry out the three-field system of farming but many of them have introduced improvements in the working of the land and are using fertilisers. Several have introduced ley grass cultivation and dairying. They own many more modern farm implements than does the average Russian peasant, they have large numbers of working and productive livestock and yields on their farms are relatively high" (24). Be that as it may, the conclusion cannot be avoided that the whole 'Mennonite experiment' initiated by the Ministry of State Properties in the 1860's was only a partial success. The Mennonites might have been more prosperous, their method of working the land superior and the productivity of their farms higher than the Russian peasants', but the fact is that they had not, as the Ministry of State Properties had originally hoped, introduced a completely new system of farming on to their farms. The high productivity of farming on the Mennonite farms, while partly attributable to the energy and industry of the people, was probably due first and foremost to the fact that their resource base was so considerable.

Given the same resources, the same amount of land and capital, the majority of Russian peasants would no doubt have been just as successful as the Mennonites.

VIII - 3c. Aspects of Farming and the Farming Economy on the Enclosed Farms Formed on Rented Appanage Land in Nikolayevskiy Uyezd (1c).

With the lessons of the earlier experiments to guide it, The Chief Administration for Appanage Lands on establishing a series of individualised farms in Nikolayevskiy uyezd in the 1890's decided to lay down very stringent regulations as to how farming should be conducted by the peasant farmers to whom it rented land. It was hoped that by making the peasants' security of tenure dependent upon their conforming to the regulations, the possibility of the migrants simply copying the local system of farming would be avoided.

On renting a farm each peasant had to agree that he would:

- introduce on to his farm a three-field rotation of winter and spring crops and short fallow.
- not alter the land use on his farm.
- sow no less than one quarter of his arable land to ley grasses.
- sow up to one-tenth of his land to industrial crops such as sunflowers, flax and poppies and up to one-sixteenth to potatoes, turnips and other fodder crops.
- not sell any manure, but use it instead to fertilise each of the fields in succession and the kitchen garden annually.
- not sell any hay, straw or chaff collected on the farm, using it all to feed his livestock.
- with his neighbours, dig irrigation ditches, ponds and wells, maintain fences and roads and construct bridges where necessary.

and

- plant no less than twenty five fruit trees on his kitchen garden within five years of occupying the farm (25).

Although some of these conditions, for example that the three-field rotation should be introduced on to the farms, were not, in the light of later research, really rational in agricultural terms, there can be little doubt that had they been adhered to some of the problems that characterised peasant farming in Nikolayevskiy uyezd would have been avoided - for instance problems of over-dependance upon wheat, low

yields, the deficiency of manure and limited livestock numbers. As it turned out, despite the threat of disappropriation, the majority of peasants showed an ever increasing tendency both to ignore the conditions laid down in their rental contracts and to adopt many of the local farming practices.

As Table 109 overleaf shows, nearly all the peasants on the twenty-six farms that were subject to investigation by the zemstvo in 1909 had within a mere fifteen years of their arrival in Nikolayevskiy uyezd ploughed up most of the hay and forest land, and also a substantial amount of the pasture; they had also abandoned the three-field rotation, eliminated fallow from the arable and had begun to sow crops, almost exclusively spring and winter grains, every year "in no particular succession" on all their fields (26). For the most part, farming technique on the investigated farms was, in the words of the zemstvo survey, "very primitive", manure was rarely used on the fields, the land was usually ploughed only to a depth of 3.5 inches because of lack of heavy double and multiple-share ploughs in the ownership of the peasants and sowing and threshing were performed by hand. Not surprisingly, the livestock were not numerous on the farms - most of the peasants owned the four horses needed to pull their ploughs but few owned either camels or oxen which were more usual in the uyezd. Cows and sheep and pigs were kept in sufficient numbers only to satisfy the domestic requirements of the peasants' family. As a result of the combination of all these factors, the productivity of farming on the farms formed on appanage land was very low, yields often not reaching the average for peasant farms in the commune (27).

There were among the twenty-six farms investigated, however, a small number on to which some improvements had been introduced. One peasant, for example, had devised a twelve-field rotation whereby five fields were planted to lucerne, six to grain and one left under short fallow each year. This rotation, as the zemstvo agronomists reported, "has turned out to be very useful and has increased the wellbeing of the khutor-occupier" (28). Similarly, another peasant, who was considered by his co-villagers to be a "progressive farmer", although not introducing a new rotation on to his land, had at least retained the three-field rotation. In addition, he had begun to experiment with the cultivation of fodder crops and ley grasses.

Table 109

Land Use, Farm Implements and Livestock on Enclosed Farms Formed
on Rented Appanage Land In Nikolayevskiy Uyezd, 1909 (11)

Size of farm (in desyatinas)	% of total land under:				Per farm number of:					
	usadba	arable hay	pasture	seed-	harv-	threshing	esters	machines	cows	horses oxen sheep
<30.0	6.4	89.5	-	4.1	1.3	-	1.6	4.4	1.4	-
30.01 - 50.0	6.1	86.7	4.6	2.6	2.0	-	1.6	0.1	0.3	10.5 2.2
50.01 - 100.0	3.2	88.0	3.7	5.1	1.9	0.1	1.1	-	3.4	5.2 8.8 1.3
>100.01	2.2	76.9	8.9	12.0	3.0	1.0	1.7	0.7	5.6	7.5 13.7 5.0
Av. Total	5.4	86.8	3.9	3.9						

The experiments with new crops, however, were unsuccessful for, as was reported in the zemstvo survey, "(the peasant) tried sowing lucerne but it was all destroyed either by drought in the first year or by the frosts in the snowless winter of 1906 - 1907; he also one year sowed lentils on half a desyatina but was not able to sell them at the local markets and, having taken them to Samara where he received only 45 kopeyka per pud, he decided not to plant them again. Peas he sowed on several occasions but every time the crop failed completely as a result of some disease" (29). Both the above peasants owned more farm implements, especially modern machinery, than did the majority of their neighbours and, as a result of introducing ley grasses on to their land, were able to support a relatively large number of working livestock - camels and oxen as well as horses. In addition to these two, there were a small number of other farms among the twenty-six investigated on which livestock and modern farm implements were also numerous. The majority of these farms were considerably larger than the average size of farm in the uyezd (see Appendix IX).

The failure of the third attempt to introduce model farms into Samara Province was attributable to many factors but undoubtedly blame must be placed primarily at the door of the Chief Administration for Appanage Lands. Having initiated the experiment, the Chief Administration, just like the Ministry of State Properties fifty years previously, failed thereafter to exercise its considerable powers to ensure that farming did in fact develop on the newly formed farms in the direction it desired. Without guidance or exhortations it was inevitable that the migrant farmers would adopt on their farms exactly the same system of farming as was practised by their long settled neighbours in the commune.

VIII - 3d. The Propaganda Value of the Enclosed Farms.

Despite their initial advantages and potential for development both the hereditary family holdings and the enclosed farms formed on rented appanage lands failed to live up to the expectations of the bodies responsible for their establishment. Partly because of lack of vigilance on the part of the Ministry of State Properties and the Chief Administration for Appanage Lands, and partly because of the pressure of population growth and rising grain prices, peasants on both types

of farms gradually adopted the same system of farming as was practised in communes everywhere in Samara Province. These farms could in no way have served as good advertisements to the local peasants of superiority of individualised 'enclosed' farming over farming in the commune - indeed it is doubtful whether by the twentieth century more than the smallest minority of the farms could be considered as belonging to the ranks of the 'enclosed'.

The situation where the Mennonite farms were concerned was different. The Mennonites, unlike their Russian peasant counterparts, kept their farms intact and, moreover, over a period of time they introduced some significant improvements into their system of farming, although they too showed a certain tendency to mimick some features of farming in the commune. They were undoubtedly more energetic and progressive farmers than were the Russians.

Without doubt, the Russian peasants had something to learn from the example of the Mennonite farmers. As it transpired, however, the educative value of the Mennonite farms was extremely limited: the Russian peasants simply did not have the opportunity to observe at close quarters how their German neighbours farmed. The Mennonites, as already noted, settled in close proximity to one another and apparently avoided all contact with the Russians. "The Mennonites", wrote Semenov, "live a completely secluded life and jealously preserve their national characteristics, avoiding if possible contact with the surrounding population and often being scornful of anything Russian" (30). The degree of the Mennonites' self-imposed isolation is illustrated by the fact that, even twenty years after they arrived in Samara uyezd, only two Mennonites had learned to speak Russian, none of the families allowed their children to attend the local Gymnasium, none read Russian newspapers or journals and none hired Russian labourers, "preferring Mords and Tatars who were cheaper to support" (31). "The Mennonites' isolated and secluded existence among the Russian peasants who could have learned something from them", the 1883 census report concluded, "has meant that it has been almost impossible for Mennonite farming to exert any influence on Russian farming" (32).

Even if the information flows had been better, it remains doubtful whether the Russian peasants could have adopted many of the features of Mennonite farming since their resource base was so much inferior. This point was made by the zemstvo census enumerators in 1909: "..... the size of the land holdings and the amount of capital

that the Mennonites possess is so out of proportion with that of the Russian peasants that the 'demonstration' value of their farms is reduced" (33). The same comment presumably applied to those of the other early enclosed farms that were successful.

VIII - 4. Aspects of Farming and the Farming Economy on the Enclosed Farms Formed Prior to 1906 as a Result of the Grass-Roots Initiative of the Peasants (2)

As part of the survey conducted in 1909 by the Agricultural Department of the Samara provincial zemstvo, sixty eight enclosed farms formed as a result not of government programmes but on the initiative of the peasants themselves were investigated in the Province. The majority was situated in Novouzenskiy uyezd and fell into three distinct groups by origin: the first group consisted of fifteen farms in Malouzenskiy volost which, due to the absence of both of the practice of repartitioning and of an obligatory rotation, had come into being within the framework of the commune (p.156), the second consisted of fourteen farms in Krasno-Kumskiy, Novo-Troitskiy and Verkhne-Karamanskiy volosts which had been purchased by the peasants from the landed nobility and the third of twenty four farms in Pokrovskiy volost formed on rented land. The remainder were all situated in Samarskiy uyezd and were of diverse origins (returns for the individual households are presented in Appendix X). Despite the fact that the system of tenure was different on many of the farms, conditions for the development of farming were, nevertheless, very similar on all: the land on the farms was laid out in no more than four parcels, and on the majority in only one, and all the peasant owners had complete freedom in decision-making and had been able to introduce whatever system of farming they chose on to their land.

A further feature these enclosed farms had in common was that they were all well endowed with land. As Table 110 overleaf shows the average size of the farms in all the volosts under consideration exceeded by several times the average size of the neighbouring peasant farms in the commune - this immediately gave them a considerable advantage over the latter.

Table 110

The Size of Enclosed Farms Formed Prior to 1906 in Novouzenskiy and Samarskiy Uyezds Compared with Farms in the Commune, 1909 (11)

Type of farm	Per farm desyatinas of land in use
Enclosed in Samarskiy <u>uyezd</u>	46.8
Non-enclosed in Samarskiy <u>uyezd</u>	15.4
Enclosed farms on allotment in Malouzenskiy <u>volost</u>	85.1
Enclosed farms on rented land in Pokrovskiy <u>volost</u>	246.2
Enclosed farms on purchased land	67.0
Non-enclosed in Novouzenskiy <u>uyezd</u>	42.5

VIII - 4a. Land Use and the Distribution of Crops.

The area of land under arable on all the farms investigated was considerable:

Table 111

Land Use on the Enclosed Farms in Samarskiy and Novouzenskiy Uyezds (11)

Type of farm	Of all land in use % under			
	Usadba	Arable	Hay	Pasture and wood
Enclosed farm in Samarskiy uyezd	1.4	69.5	12.9	16.2
Novouzenskiy uyezd:				
Enclosed farms on allotment	1.3	58.1	32.0	8.6
Enclosed farms on rented land	0.6	91.1	4.5	3.8
Enclosed farms on purchased	1.1	88.4	1.7	8.6

On the enclosed farms on allotment and purchased land in Novouzenskiy uyezd it occupied over two-thirds of the total area of land in the use of the peasants, on the majority of enclosed farms in Samarskiy uyezd it occupied over three-quarters of the total, while on the rented enclosed farms it rose to over 90%. The particularly extensive area of arable on the latter group of farms can possibly be accounted for by the fact that the peasants, insecure in their tenure, were determined to obtain the maximum possible returns from their land in the short term and therefore paid somewhat less attention than was normal to retaining a balance between different uses of the land.

Obviously short of non-arable land, many of the peasants on the enclosed farms rented hay and pastureland from the crown and nobility. Such was particularly widespread in Samarskiy uyezd, but it was evidently mainly the peasants on the large farms who could afford to do this - only half as many of the peasants on the small farms rented land as did those on the medium and large sized farms. Even after the addition of rented hay and pasture, over three-quarters of the total land in use on the small enclosed farms (under 30 desyatinas) in Samarskiy uyezd remained under arable. Much the same picture obtained on the enclosed farms in Novouzenskiy uyezd.

Unfortunately, no exact figures are available but, according to the 1909 zemstvo report, spring wheat dominated on the arable of all the enclosed farms investigated, although winter rye and other crops - spelt, oats, fodder crops and ley grasses - were also cultivated in greater or lesser quantities. On few of the farms, however, it was reported, was there evidence of there being any really marked shift away from the emphasis on grain. Only half a dozen were recorded as having at some time introduced ley grass cultivation on to their land, but in most of these cases the initial experiments were not backed up in subsequent years, due either to the selection of strains ill-suited to the environment in Samara, or because they occupied an insignificant portion of the sown land.

VIII - 4b. Livestock.

Reflecting the importance of commercial grain farming, the limited resources of hay and pasture on the enclosed farms investigated were used primarily to support large numbers of working livestock:

Table 112
Livestock on the Enclosed Farms in Samarskiy and Novouzenskiy
Uyezds (11)

Type of farm	Per farm head of:					
	cattle	sheep	pigs	horses	camels	oxen
Enclosed farms in Samarskiy uyezd	5.8	8.9	1.8	7.9	-	0.4
Non-enclosed farms in Samarskiy uyezd	1.4	4.1	0.5	2.1	-	0.05
Novouzenskiy uyezd:						
Enclosed farms on allotment	4.7	8.4	1.4	6.0	6.8	4.3
Enclosed farms on rented land	8.7	19.6	7.4	18.4	13.8	16.7
Enclosed farms on purchased land	6.3	16.1	4.0	16.1	5.6	1.6

In Samarskiy uyezd, the horse was the most important animal kept and all farms had at least three head, compared with the average of 2.1 in the commune. In Novouzenskiy uyezd, the most common working livestock on the enclosed farms, with the exception of those on allotment land, were not horses but rather camels and oxen. These animals preferred because, being stronger, they could more easily cope with the heavy steppe soils of the uyezd and also because they were well adapted to surviving under arid conditions and had very low fodder requirements. The numbers of working livestock, of whatever type, varied according to the size of farm, being more numerous on the large than the small (Table 113). Interestingly in Novouzenskiy uyezd, most of the field work on the smaller enclosed farms was performed by horses which were cheaper to purchase than oxen and camels, although their cost over the long term was greater. (See Table 113 overleaf)

In Samarskiy uyezd it is interesting to observe that although the number of horses on the small farms was generally lower than on the large and medium sized, on the majority the number relative to the amount of land in use was considerably higher (Table 114). The explanation for this presumably was the same as in Tula Province, namely, that as a result of the absence of the communal order and, with it, of the custom of mutual co-operation between households, every peasant was forced regardless of the size of his farm to become self-sufficient in working livestock. (See Table 114 overleaf)

Table 113

Working and Productive Livestock on the Enclosed Farms in
Samarskiy and Novouzenskiy Uyezds by Size, 1909 (11)

Type of farm (in desyatinas)	Samarskiy Uyezd							
	cattle	sheep	pigs	horses				
0.0 - 30.0	3.2	7.1	2.0	5.1				
30.01 - 50.0	5.0	8.2	1.4	5.0				
50.01 - 100.0	10.5	18.8	1.0	15.4				
>100.01	14.7	2.8	3.5	20.0				

Type of farm (in desyatinas)	Novouzenskiy Uyezd							
	cattle	sheep	pigs	horses	camels	oxen		
0.0 - 30.0	5.4	15.8	2.8	9.3	1.0	-		
30.01 - 50.0	2.8	2.3	0.7	6.8	2.0	1.3		
50.01 - 100.0	5.1	13.6	3.3	10.6	7.3	2.0		
>100.01	8.7	18.8	6.7	18.2	13.2	17.1		

This would suggest that the small enclosed farms in Samarskiy uyezd, like their counterparts in Tula, were overstocked and this must have put a considerable strain on their economy.

The number of productive livestock kept on the enclosed farms investigated was lower than the number of working livestock and especially so in Novouzenskiy uyezd. As was the case with working livestock, the number of cows, pigs and sheep kept was in direct relation to the size of farm.

VIII - 4c. Fertilisers and Farm Machinery.

Despite the naturally fertile soils in Samara Province, it had become necessary by the twentieth century to add fertilisers to the fields in all of the northern yezds and increasingly this need was also felt in the southern yezds. In Samarskiy uyezd there was a deficit of manure available on most of the enclosed farms investigated. According to the zemstvo investigation, this deficit was particularly marked on the smaller enclosed farms; on only 45% of those under 30 desyatinas in size was any manure applied to the land. Among the larger farms the percentage was higher. On nearly all the farms, however, the zemstvo reported: "..... the manure is of poor quality and is applied in insufficient quantities for it to have any marked effect on the fertility of the soil" (34). On only four farms investigated in the uyezd, all of which were over 30 desyatinas in size, did the report note that there was "adequate and efficient" use of manure on the land (35).

The most progressive aspect of farming on the enclosed farms was in the sphere of mechanisation. According to the zemstvo report all the farms were adequately equipped with the basic farm implements, while a considerable number had modern farm machinery of the type recommended by the Agricultural Department - seed-drills, harvesting and threshing machines and the multiple-share plough, the latter essential if the heavy soils especially in the south were to be ploughed to a reasonable depth. In respect of the ownership of modern farm implements and machinery, however, the difference between the large and small farms was most obvious: (see Table 115 overleaf)

VIII - 4d. The System of Farming and the Farming Economy of the Enclosed Farms.

The principal activity of all the peasants on the enclosed farms investigated in the two uyezds was the production of grain. The rotations used on the farms indicate the bias. In Samarskiy uyezd, the peasants on the enclosed farms like their neighbours in the commune, had abandoned the long-fallow system and had established or were in the process of establishing the three-field rotation. Only on one of the farms had an improved four-field rotation of spring wheat - winter rye - fallow - ley grasses been introduced.

In Novouzenskiy uyezd in contrast, the long-fallow system, with the emphasis on the cultivation of spring wheat but with small quantities of barley, spring oats and winter rye also being grown, dominated on most of the farms. On the fifteen farms still technically in communal ownership in Malouzenskiy volost, the area of land actually occupied by fallow was, as was characteristic on all farms in this part of the Province, now small (on the majority only one-third of the total area of the arable) and hence the length of the resting period was no more than one or two full years. It was only on the farms with the greatest abundance of land that the area of long-fallow was relatively extensive, but even on these it was usually rested for a maximum of three years at a time. On few of the farms had there been by 1909 any real attempt, so the zemstvo reported, to introduce a correct succession of crops or to experiment with the cultivation in rotation of leguminous and fodder crops.

The long-fallow system also dominated on the enclosed farms formed on purchased land and in the majority of cases, as the zemstvo report noted, it had a very "unorganised character", there being no systemised use of land nor any regulated succession of crops. There were among these farms, however, a number of exceptions to the general rule. On one farm (36), the land had been divided into eight fields each of which was cultivated in succession and then left under long-fallow, while on the six farms making up the Ney-Tsyurykh khutor a three-field rotation of hard beloturka wheat - soft wheat - long-fallow had been established on three-fifths of the arable. At the other extreme there was one farm (37) on which long-fallow had been eliminated entirely, the arable being sown year after year to spring and winter grains without being rested at all.

The system of cultivation practised on the rented enclosed farms differed from that on the other enclosed farms in Novouzenskiy uyezd and it was clearly designed to maximise the output of grain in the short term. By 1909 definite rotations, with the long-fallow occupying only one or two of the fields and spring and winter grains the remainder, had been introduced on to the majority of farms. In the most popular, a three-field rotation of long-fallow - hard wheat - soft wheat, the long-fallow occupied only one-third of the arable, but in others, the four, five, six and even nine-field rotations, it could be reduced to between one quarter and one-ninth of the arable. The latter rotations were found on approximately one-third of the farms investigated. On one farm two rotations ran side by side: a four field rotation of fallow - hard wheat - soft wheat - spring oats on one parcel and a rotation of fallow - winter rye - hard wheat - spring grains on the other. Clearly in this case the farmer was in the process of introducing the classic three-field rotation as practised in the northern yezds on to his farm. On a small minority of farms the three-field rotation had in fact replaced long-fallow rotations.

Although the fact that they did have a regular succession of crops meant that the enclosed farms on rented land were more advanced than the other enclosed farms in Novouzenskiy uyezd, on few was the rotation thus adopted suited to the environmental conditions of the uyezd. According to the zemstvo report, however, on one farm (38) a 'correct' five-field rotation had been introduced of spring wheat - spring grains plus intertillage crops - short fallow - winter rye - long-fallow, and on another seven farms intertillage crops, mainly maize and sunflowers, were cultivated in rotation. In addition, one peasant was recorded as having introduced lucerne on to his land but, apparently, had been forced to abandon the experiment because livestock from a neighbouring farm kept straying in to the fields and destroying the crop (39).

With the emphasis in all the rotations practised on the enclosed farms so heavily biased toward the production of grain, it is not surprising that livestock husbandry on the majority had little or no commercial significance. The zemstvo report noted that on most farms the livestock were poorly fed - in the winter on straw, chaff and small quantities of hay and in the summer on what permanent pasture there was available. The result was that the animals were small, weak

and their productivity low. In feeding, the working livestock, reflecting the importance of arable farming, were always given preferential treatment over the productive livestock. There were however differences between farms in the importance attached to livestock husbandry which to a large extent reflected the degree of difficulty the peasant farmers experienced in providing fodder.

In Samarskiy uyezd, the zemstvo reported, whereas one desyatina of hayland had to support two or three head of livestock on the small farms, on the larger farms the equivalent amount had to support only two head or fewer. Thus on the latter group of farms, livestock inevitably were better fed than on the former and their productivity correspondingly higher; the milk yield of cows, for example, increased in direct relation with the increases in farm size:

Table 116

Productivity of Cows on Enclosed Farms in Samarskiy Uyezd, 1909 (11)

Size of farm (in desyatinas)	Milk Yields in verder per annum
0.0 - 30.0	78.0
30.01 - 50.0	94.0
50.01 - 100.0	} 112.0
>100.01	

The standard of livestock maintenance, according to the zemstvo report, was 'above average' on five of the farms investigated in the uyezd (40); all but one were over 30 desyatinas in size. On the remaining farms, however, it was reported that livestock were no better cared for than in the commune. Improved breeds of dairy cows had been introduced on to three of the enclosed farms, but on the rest all the livestock were of a common local breed (41).

Livestock products were sold by peasants on nearly all the enclosed farms investigated in Samarskiy uyezd, but as Table 117 overleaf shows the tendency was more widespread among the large farms than the small. Two peasants sold milk to a cheese-making factory on a regular contractual basis (42), while on another three farms (43) the production of milk was sufficient to warrant the purchase of milk separators.

Table 117

Marketing of Livestock Products on Enclosed Farms in Samarskiy
Uyezd, 1909 (11)

Size of farm (in desyatinas)	% number of farms marketing:	
	wool	milk and butter
0.0 - 30.0	20.0	27.3
30.01 - 50.0	37.5	61.5
50.01 - 100.0) 41.7	46.2
>100.01		

VIII - 4e. Yields on the Enclosed Farms.

Records of yields are available for only some of the enclosed farms investigated. In Samarskiy uyezd, yields of all the principal grains on the enclosed farms tended to exceed those on farms in the commune although they varied with the size of farm:

Table 118

Yields for the Major Grains on Enclosed Farms in Samarskiy Uyezd,
1909 (11)

Size of farm (in desyatinas)	Yields in puds per desyatina 1909:		
	winter rye	spring wheat	oats
0.0 - 30.0	36.6	31.0	27.4
30.01 - 50.0	50.5	42.3	37.4
50.01 - 100.0) 46.7	48.8	52.0
>100.01			

On the enclosed farms formed on allotment land in Malouzenskiy uyezd yields were on average lower than on comparable farms to the north but they similarly tended to increase along with the increase in the size of farm. According to the zemstvo report, yields on the rented enclosure farms in Novouzenskiy uyezd were higher than on peasant farms in the commune and further it was noted that "the rented khutors on the whole do not suffer as frequently from harvest failures as do other farms" (44).

VIII - 4f. The Propaganda Value of the Enclosed Farms.

Although compared with farms elsewhere in European Russia, the enclosed farms formed prior to 1906 in Samara Province by the peasants themselves were backward in purely agricultural terms, they nevertheless would appear (bar the Mennonite farms) to have been considerably more successful than the enclosed farms that were introduced 'from above' in the Province. On a number of them, various improvements along the lines suggested by contemporary agronomists had been introduced and the beneficial effect of these was testified by the somewhat higher yields than the enclosed farms obtained compared with farms in the communes. The zemstvo report noted, however, that on few of the farms had measures been introduced that were effective in reducing the risk of harvest failure in years of drought (45).

Of the farms investigated in Samarskiy and Novouzenskiy yezds seventeen were identified by the zemstvo as being suitable advertisements to the local peasants of various improved methods in farming and of the superiority of individualised over communal enterprise (see Table 119 overleaf), which was remarkably high - over one quarter of the total. The zemstvo report went on to note, however, that it was doubtful whether many of the peasants in the commune could in reality be expected to emulate the 'models', the same reason being given as for the Mennonite farms, namely that the resource base of the enclosed farms was way out of proportion with the resource base of the average peasant farm in the commune. The majority of the enclosed farms on which improvements had been introduced were several times larger than normal peasant farms.

The zemstvo report went on further to note with regret that the more successful of the enclosed farms rarely were grouped together spatially so that, "before us is painted a picture of the type of farm suitable for our climate" (46). The successful farms were invariably

Table 119

Farms Identified by Zemstvo as being suitable 'Models' for the
Local Population in Samarskiy and Novouzenskiy Uyezds (11)

Name of Proprietor and location of farm	Nature of Improvements Observed	Potential for Future	Size of farm in des.
K.A. Suits Samarskiy uyezd	1. Well equipped with machinery. 2. Use of regulated seed drill. 3. Early fallow.	Does have potential	19.5
F.S. Barchenkov Samarskiy uyezd	1. Use of manure. 2. Double ploughing of fallow field.	Little potential - cannot envisage the owner accepting change in arable farming.	34.0
T.A. Tsel Samarskiy uyezd	1. Use of manure. 2. Deep ploughing of fallow. 3. Early fallow.	Does have potential - intends to introduce ley-grass cultivation	40.0
K.K. Kitsman Samarskiy uyezd	1. Use of manure. 2. Deep ploughing of fallow. 3. Early fallow. 4. Harvesting/threshing, by machinery. 5. Grass cultivation. 6. Good livestock husbandry.	Does have potential	205.0
A.G. Shitikov Samarskiy uyezd	1. Use of manure. 2. Grass cultivation. 3. Deep ploughing.	Does have potential - intends to improve breed of livestock and develop further grass cultivation.	47.3
I & V Arkhip Samarskiy uyezd	1. Threshing and harvesting by machine.	Does have potential - the owners under- stand the need to develop grass culti- vation, use of manure and of modern machinery.	14.5
P.V. Koganov Malouzenskiy volost	1. Use of seed drill. 2. Ley grass cultivation.	Hopes to construct snow brakes on fields.	25.0
V.K. Myasnikov Malouzenskiy volost	1. Irrigated part of fields. 2. Experimented with ley grass cultivat- ion - but failed.	Intends to start using a seed drill	65.0

Table 119 - continued...

Name of Proprietor and location of farm	Nature of Improvements Observed	Potential for Future	Size of farm in des.
S.S. Sorokin Malouzenskiy volost	1. Irrigates one field and as a result has tripled yield.	-	64.0
P.G. Selivanov Malouzenskiy volost	1. Irrigates 5 des. and as a result has tripled yields. 2. Ley-grass cultivation.	Intends to increase area of irrigated land but does have problem of lack of capital.	90.5
S.Kh. Kunts Verkhne - Karamanskiy volost	1. Use of seed-drill: turned out to be less successful than Kunts had expected in view of great variety of soil type on his farm.	Has not thought of any other improvements although he is very energetic and not afraid of experimentation and innovation.	140.0
A.A. Martinenko Pokrovskiy volost	1. Early fallow. 2. Lucerne cultivation but failed due to destruction by neighbours livestock.	Intends to introduce many improvements. 1. Ley-grasses 2. Seed-drill 3. Expand dairy herd 4. Sow fodder crops.	145.0
V.F. Lebed Pokrovskiy volost	1. Early fallow 2. Good care of livestock. 3. Use of organic fertiliser on field. Has experienced problems - namely cannot find the appropriate machines to work the fallow, nor pure breed bulls.	1. To improve breed of cattle. 2. To build livestock shed. 3. Ley-grasses. 4. Seed-drill. 5. Market gardening.	93.0
E.Kh. Kober Pokrovskiy volost	1. Use of organic fertilisers on worst parts of long fallow. 2. Early and deep ploughing. 3. Improved livestock breed.	1. New ley-grass rotation. 2. Seed-drill.	142.0

Table 119 - continued...

Name of Proprietor and location of farm	Nature of Improvements Observed	Potential for Future	Size of farm in des.
A.F. Kramyer Pokrovskiy volost	1. 5-field rotation with one field under short fallow and one under one year long fallow. 2. Autumn ploughing to a depth of 8.75 inches.	1. Use seed-drill. 2. Ley-grass cultivation.	150.0
Kh.Kh. Shults Pokrovskiy volost	1. Deep autumn plough- ing. 2. 3-year long fallow. 3. Use of short fallow to eliminate weeds.	-	149.0
Ya.G. Shpindler Pokrovskiy volost	1. Deep ploughing. 2. Use of seed sorter.	-	143.0
N.K. Kremer Pokrovskiy volost	1. Deep ploughing since 1900.	1. Use seed-drill. 2. New rotation.	14.50

surrounded by others of their kind which were considerably less successful - this inevitably reduced the impact of the former. For every enclosed farm on which improvements had been introduced there were a larger number on which farming was conducted in much the same way as in the commune: the peasant observing this would thus be unlikely to be convinced of the advantage of enclosure.

VIII - 5. Aspects of Farming and the Farming Economy on the Enclosed Farms Formed as a Result of the Adoption of the Stolypin Land Reform (3)

Since, despite their very favourable resource base, the enclosed farms formed in Samara Province prior to 1906 achieved an only limited degree of success, little in the way of progress could be expected on the 'Stolypin' khutors and otrubs. Compared with their earlier counterparts, the enclosed farms formed after 1906 were poorly endowed with resources - some of the households that enclosed had under 10 desyatinas of land and some had no livestock nor any farm implements. Unfortunately, the khutors and otrubs for which information is available - that is all those formed in Nikolayevskiy uyezd - had not long been in existence when they were investigated by the G.U.Z.i.Z., and so it is possible to identify only the trends of development on them. Not surprisingly, the pattern of farming on the farms was found to be in all essentials similar to the pattern in the commune. However some improvements, albeit not major ones, had been introduced on to some but the number compared with Tver and even Tula was extremely small.

VIII - 5a. Land Use and the Distribution of Crops on the Enclosed Farms.

In view of the absence of data it is not possible to determine how or whether the pattern of land use changed on the farms that were enclosed in Nikolayevskiy uyezd but, as Table 120 overleaf shows, the area of land occupied by arable was very great indeed - over 95% of the total and that under hay, pasture and wood limited.

Table 120

Land Use on the Enclosed Farms in Nikolayevskiy Uyezd, 1913 (3)

% of land owned under:			
arable and usadba	hay	Pasture and wood	other
95.1	0.1	4.3	0.5

The greater part of the arable was at the time of the G.U.Z.i.Z. investigation sown to spring wheat and virtually all the remainder to other grains. The share of the sown land occupied by fodder crops and industrial cash crops was meanwhile insignificant:

Table 121

The Distribution of Crops on Arable on Enclosed Farms in Nikolayevskiy Uyezd, 1913 (3)

% of arable under:										% of farms with ley grasses
winter rye	winter wheat	spring wheat	spring oats	mil- let	bar- ley	pot- atoes	flax	ley grass	other	
17.7	0.4	70.5	2.8	2.0	4.6	0.5	0.2	0.3	1.0	1.8

VIII - 5b. Livestock Numbers of the Farms Before and After Enclosure.

As in Tver and Tula Province, enclosure in Samara had an immediate and marked effect on the number of livestock that could be kept on peasant farms. In Nikolayevskiy uyezd, between the time of enclosure and the time of the official investigation in 1913, the number of livestock - working and productive alike - fell sharply on the otrubs and, simultaneously, the percentage of households with neither horse nor cow increased. Even on the small number of khutors, which were better placed than otrubs where resources were concerned, the head of horses and sheep per farm declined: (see Table 122 overleaf).

Table 122

Livestock on the Enclosed Farms in Nikolayeveskiy Uyezd Before
and After Enclosure (3)

	At the time of enclosure		At the time of investigation	
	khutors	otrubs	khutors	otrubs
Number of livestock per farm:				
horses	5.8	3.5	5.4	2.7
cows	3.3	1.9	3.4	1.5
oxen	2.6	1.0	2.6	0.4
sheep and goats	10.6	7.2	10.3	5.4
pigs	3.3	1.1	4.4	0.9
poultry	23.3	14.5	26.4	14.4
% number of farms:				
without any livestock	5.5	4.0	1.4	3.3
without cows	5.5	10.2	2.7	13.2
without horses	5.5	11.3	1.4	13.2

The G.U.Z.i.Z. report acknowledged that the fall in livestock numbers was more marked in Nikolayevskiy uyezd than in any of the other yezds it investigated and that this was an 'undesirable' trend. Certainly the number of horses, cattle, pigs and sheep was lower per enclosed farm than in either Rzhevskiy, Bogoroditskiy or Yepifanskiy yezds.

VIII - 5c. Fertilisers and Machinery on the Enclosed Farms.

In view of the decline in livestock numbers on farms after enclosure, the amount of manure potentially available to fertilise the land on the khutors and otrubs must also have declined sharply. Nevertheless, as Table 123 overleaf shows, it would appear from the G.U.Z.i.Z.'s survey that some peasants, although they constituted a minority, did attempt to meet the need to fertilise their fields after enclosure. Whereas none of the farms investigated used manure before enclosure, in 1913 8.8% were recorded as doing so.

Table 123

Fertiliser Use and Machinery on the Enclosed Farms in
Nikolayevskiy Uyezd (3)

	At the time of enclosure	At the time of investigation
% number farms using manure on land	0.0	8.8
% number of farms not using manure on land	100.0	91.2
Per 100 farms number of:		
<u>sokha</u>	1.6	0.5
iron ploughs	84.7	94.0
wooden harrows	0.2	0.2
wooden harrows with iron teeth	380.3	349.9
iron harrows	7.6	24.9
seed-drills	4.3	10.4
harvesters	24.2	48.0
winnowing machines	23.9	43.2
threshing machines	2.2	3.4
% number of farms with:		
iron harrow	1.7	3.8
seed-drill	2.1	6.5
harvester	22.6	43.6
winnowing machine	22.0	40.2
threshing machine	2.1	3.2

Like the enclosed farms of earlier origin, the principal advantage the khutors and otrubs in Nikolayevskiy uyezd would appear to have had over non-enclosed farms was that they were relatively well equipped with modern farm implements and machinery. The percentage number of farms on which there was an iron harrow, as opposed to the more common and lighter wooden harrow with iron teeth, increased after enclosure, as did the number of iron ploughs, seed-drills, harvesting and winnowing machines (table 123).

VIII - 5d. The System of Farming on the Enclosed Farms.

It is evident from the information presented above that grain production was the principal activity of the peasants on the enclosed farms investigated. Little attempt was made by the peasants who enclosed to diversify the type of crops they cultivated on the arable or to expand any other branches of their farming economy; commercial livestock husbandry, for example, was recorded as having been developed on only 0.4% of the total. Meanwhile, the improvements that had been introduced - the increased use of manure and the use of modern agricultural machinery - were designed to help increase the output of grain.

The bias towards commercial grain farming was reflected in the fact that, although it could only have a detrimental effect in the future, little of the arable was left under fallow on the farms each year while non-grain crops were not included in rotations. The pestropol'ye and long-fallow systems were recorded as being in use on no less than 98% of the enclosed farms:

Table 124

Rotations Used on Enclosed Farms in Nikolayevskiy Uyezd, 1913 (3)

Type of rotation	At time of enclosure	At time of investigation
Three-field	0.0	1.3
Transitional to multiple-field	0.0	0.8
Pestropol'ye and long-fallow	100.0	97.9

There were some farms on which the introduction of the three-field and multiple-field rotations indicated that some move away from the existing commercial grain bias in farming was taking place but they were few in number.

The decline in the number of working livestock on farms after enclosure in view of the obvious importance of grain production emphasises how serious was the problem of providing fodder on the enclosed farms. This problem, it is true, was encountered on enclosed farms throughout Russia but it was particularly acute in Samara; here the area of land left under hay and pasture was exceptionally small,

fallow, which elsewhere could be used for grazing, entirely absent on many of the farms and fodder crops, the substitute for 'naturally' occurring hay and pasture, barely cultivated. Despite the fact that many of the peasants on the enclosed farms retained their rights to use communal pasture and over three-quarters rented hay or pastureland (Table 125) the task of providing sufficient fodder for livestock remained perhaps the greatest problem the peasants had to face during the years immediately following enclosure.

Table 125

Use of Communal Pasture and Land Rent on Enclosed Farms in
Nikolayevskiy Uyezd, 1913 (3)

% number of farms:	At the time of enclosure		At the time of investigation	
	khutors	otrubs	khutors	otrubs
retaining use of communal pasture			78.8	
with rented land	46.6	33.5	53.4	46.5
with rented arable	88.2	58.0	89.7	49.9
with rented hayland	38.2	75.8	28.2	71.3
with rented pastureland	17.6	15.7	23.1	25.9

VIII - 5e. Yields on the Enclosed Farms.

Although the system of farming practised was in essence the same, yields for all the major grains on the enclosed farms in Nikolayevskiy uyezd exceeded those in the surrounding communes: (see Table 126 overleaf). The reason for this can only lie in the greater use of fertilisers and more effective implements and machinery on the former. Compared with Rzhevskiy and Yepifanskiy yezds. however, yields on the khutors and otrubs in Nikolayevskiy uyezd were very low indeed.

Table 126

Yields on Enclosed Farms in Nikolayevskiy Uyezd Compared with
Peasant Farms in the Commune and the Estates of the Landed
Nobility, 1913 (3)

Type of farm	Yields in puds per desyatina:					
	winter	winter	spring	spring		
	rye	wheat	wheat	oats	Barley	Potatoes
Enclosed farms	44.0	53.4	51.6	64.5	48.5	475.5
Farms in commune	40.5	N.D.	40.0	46.0	52.0	N.D.
On Nobles' estates	48.0	N.D.	44.0	50.5	53.0	N.D.

VIII - 6. State Agricultural Aid Programmes for Peasant Farms in
Samara Province

The failure of the peasants to introduce substantial changes into the system of farming on to their farms after enclosure can perhaps be attributed principally to the pressure the market exerted on them to produce the maximum possible amount of grain. The comment made by Novikov in relation to the situation in Tula Province, that there was little likelihood of peasants agreeing to reduce their sowings of grain and hence to intensify their system of farming while grain prices continued to rise held doubly true for Samara. In addition, however, lack of progress on the enclosed farms can be put down to the general absence of knowledge among the peasants of alternative systems; the few attempts to familiarise the peasants with improved systems of farming made in the nineteenth century, as has been shown, met with almost unqualified failure. Thus the Governor of Samara Province, Yakunin, commented in 1910 with justification that among the peasants on the enclosed farms, "there is a complete ignorance of improved methods of farming (and) fear of innovation", and further that, "unfortunately the peasants themselves cannot immediately adopt rational methods of farming because they do not have the technical knowledge, the experience or the means (to introduce improvements)" (47). This underlines the fact, apparent from the experience of the early enclosed farms in the Province, that enclosure was only a first step

along the road to raising the standard of farming. The peasants on the enclosed farms needed to be guided and assisted by experts in new farming techniques: "... and if this task is not fulfilled", Yakunin argued, "then enclosure of the land will lose its significance and will fail in its fundamental aim" (48). It is pertinent, therefore, to examine the record of the various organisations established in Samara to help the peasants in the improvement of their system of farming.

An agricultural advisory service was not established in Samara Province until the last decade of the nineteenth century. At first, during the 1890's, the efforts of the agricultural office thus formed were directed primarily towards founding in various parts of the Province machinery warehouses from which the peasants could purchase on favourable terms modern farm implements and machinery; also, at the same time, a number of livestock breeding stations were set up, two secondary agricultural schools founded and some attempts made to establish 'demonstration' fields actually in the peasant communes. The scale of the zemstvo's activity during the first ten years was, however, modest and few peasants either knew or took advantage of the services offered. The Witte Commission reported in 1902 that: "Agricultural assistance to the peasants is very weakly developed in the Province" (49), and in Buguruslanskiy uyezd, for example, it noted that there was "no local agricultural organisation which is familiar with the needs of the peasantry there is no channel of communication in existence between the peasants and the zemstvo" (50). After the turn of the century, however, the situation began to change as the zemstvo increasingly paid more attention to establishing contact with the maximum possible number of farmers in the Province. To this end, the Province was divided into a series of agricultural sections (uchastki) each of which was in the charge of a resident agronomist under whom there was appointed a number of farm advisors and assistants. In every section there was at least one machinery hire depot, a machinery warehouse, a mobile seed-cleaning and sorting unit and a livestock breeding station for the use of the local peasant farmers. The first such section was formed in 1906 in Novouzenskiy uyezd, the first not only in Samara but indeed in the whole of European Russia. Thereafter the number of sections grew until in 1910 there were more than thirty-six in the Province, each usually embracing no more than half a dozen volosts.

The majority of the agronomists in Samara concentrated upon improving the methods of cultivation and of working the soil on the peasant farms in their sections, the more difficult and complicated tasks of introducing completely new rotations and developing livestock husbandry and other branches of farming being considered, during the early stages of work, of secondary importance. First priority was in fact given in nearly all to familiarising the peasants with the use of the seed-drill as a means both of economising on seed and increasing soil fertility. In order to reach out to as many peasants as possible, the agronomists, the farm advisers and assistants visited the villages and individual farms in their section, conducting lectures, having informal discussions and distributing pamphlets among the peasants. A major, and probably the most effective, part of their work involved the establishment in villages of demonstration fields and even demonstration farms, which enabled the peasants to observe for themselves the advantages of various improved farming techniques and practices. Apart from what can be described as propaganda work, the agronomists also organised the free distribution of improved fodder, grain and grass seeds to peasant farmers and offered, also free of charge, the services of the mobile seed-cleaning and sorting unit and the machinery hire depots and livestock breeding stations. Any peasant who showed an interest in improving his farm was immediately allocated a farm adviser who actively helped him introduce the improvements and monitored the progress (51).

The enclosed farms until 1910 were the sole responsibility of the zemstvo and, as in Tver and Tula, were accorded no particular place of priority in the receipt of assistance. In that year, however, the Chief Administration for Land Settlement decided to establish in those areas of the Province where agricultural assistance from the zemstvo was comparatively weakly developed, its own agricultural organisations catering specifically for the needs of the newly formed khutors and otrubs. Within two years, twelve G.U.Z.i.Z. Agricultural Sections had been formed in four uyezds (see Figure 34 of Nikolayevskiy uyezd) which together served approximately one quarter of the enclosed farms in the Province. In the remaining uyezds, the Land Settlement Committee did not consider it necessary to form its own sections or to appoint its own agronomists distinct from those of the zemstvo, but it did establish a series of machinery hire depots and livestock breeding stations in areas where there were particularly large clusters of khutors and otrubs.

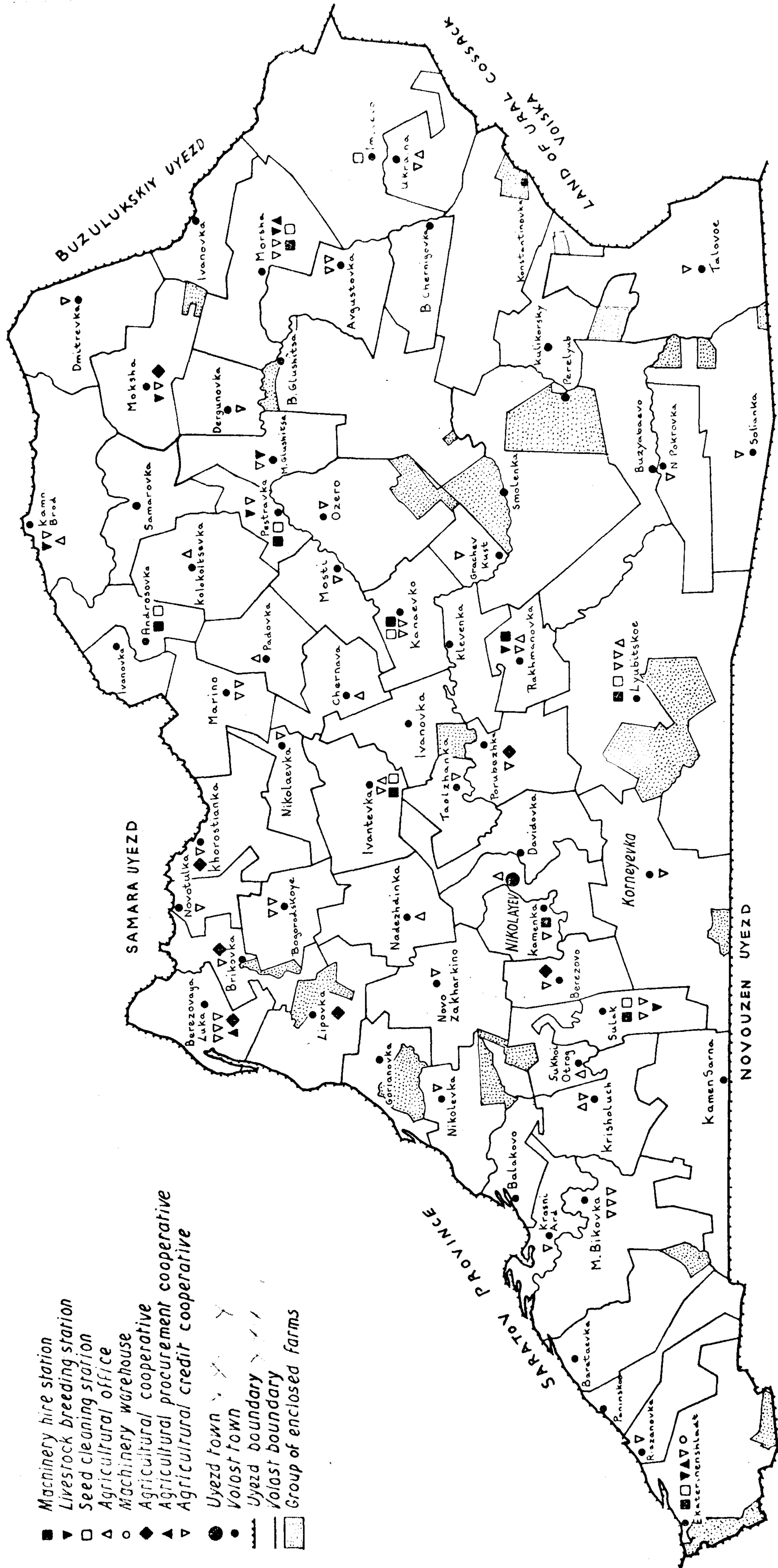


Fig 34 — Nikolayevskiy uyezd — Distribution of enclosed farms investigated in 1913 & G.U.Z.I.Z. agricultural aid stations

The zemstvo agronomists, nevertheless remained responsible for three-quarters of the enclosed farms in the Province (52).

Evidently, as in Tula, a considerable difference of opinion developed among the officials in the zemstvo as to whether the enclosed farms should in effect be given preferential treatment over the non-enclosed. On the one hand, some agronomists argued that agricultural assistance should be rendered "to all the peasants, regardless of the type of tenure and organisation (of their farms)" (53) and indeed the Samarskiy uyezd zemstvo in 1910 passed a resolution to the effect that: "Bearing in mind that the Samarskiy uyezd agricultural organisation, pursuing the aim of improving peasant farming has had, as the experience of several years has shown, a favourable effect on farming on all types of farm, this meeting reaffirms the correctness of the path chosen by it to assist all the peasant farmers in the uyezd and not just those who have recently moved on to khutors and otrubs" (54). On the other hand, there was a large body of agronomists who maintained that, in view of their relative scarcity, the resources available to the zemstvo should be used, in words of Yakunin, "in order to attain the most immediate practical results" (55) which, according to him, was possible only by concentrating attention upon introducing improvements on to the enclosed farms. "There is no need to prove to you", Yakunin maintained at the 1909 annual meeting of the Samara provincial zemstvo, "that agricultural aid must first and foremost be directed towards the peasants on the enclosed farms" (56). In the event, the opinion of neither group of protagonists in the Province prevailed and there was a fair division between those who worked mainly with peasants on the enclosed farms and those who, making no such distinction, worked with peasants on all types of farms (Table 127). It is interesting to observe, however that the vast majority of the agronomists found, as Yakunin had predicted the enclosed farms to be more "useful and adaptable" than the non-enclosed to the types of improvements they were attempting to introduce: (see Table 127 overleaf).

According to an official government report in 1910, the zemstvo in Samara was very active and its record of success relatively impressive. In 1910 it ranked no less than sixth among all the provincial zemstvos of European Russia in terms of the total amount of capital, and eleventh in terms of the percentage share of the budget expended upon agricultural aid, and it had apparently distinguished itself particularly in the sphere of 'propaganda' work and in the building up of numerous large and well-stocked machinery warehouses (57).

Table 127

Results of the Questionnaire Survey Conducted among the Zemstvo
Agronomists in Samara Province in 1914*

QUESTION POSED:		Distribution of answers in %		
		enclosed farms	farms in commune	neither one nor other dominates
Question 1	With which type of farm does the Agronomist do most work?	43.9	2.0	54.1
Question 2	Which type of farm does the Agronomist find the most adaptable for the introduction of improvements?	89.4	5.3	5.3

* Trudy IV-ogo Samarskogo Gubernskogo Agronomicheskogo Soveshchaniya
..... op.cit.

A questionnaire survey conducted in 1914 by the zemstvo among nearly five hundred peasant farmers, approximately 10% of whom were on enclosed farms, revealed that by the outbreak of the First World War the agronomists had gained a certain amount of popularity in the Province (58). As Table 128 overleaf shows, nearly two-thirds of the respondents were of the opinion that everyone in their village was aware of the existence of the zemstvo agronomist but, significantly, a large number of the remainder maintained that his activities applied only to the peasants on the enclosed farms. The majority thought that only a few of the peasants in their village had actually used the services offered by the agricultural organisations but over one-third of them did say that, despite this, the local peasants were convinced of the advantages to be gained. It is evident, however, that the zemstvo agronomists still had a considerable way to go in justifying their existence to the peasantry before they could begin the real work of actually introducing improvements on to the farms.

Table 128

Results of the Questionnaire Survey Conducted among 478 Peasant
Farmers in Samara Province, 1914* (A)

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The respondents themselves were evidently drawn from the more progressive of the peasant farmers in the Province, over half of them having used the services of the agricultural department. As Table 129 overleaf shows, the type of assistance that had been given to these farmers varied. In most cases it was concerned with the hiring out of machinery, particularly of seed-drills, and the demonstration of their use, but in addition a considerable amount of work had been undertaken among the respondents in the field of increasing farm productivity. Despite the fact that the majority of the respondents had been given assistance of a specific kind, over two-thirds agreed that they had benefited most of all from the general discussions and consultations about all aspects of farm improvement; many had been stimulated to experiment with new methods and techniques. The need for more lectures and talks was therefore the most frequently recurring suggestions made by the respondents when questioned about the direction in which agricultural assistance should be developed in the future.

Although the efforts of the zemstvo agronomists had by 1914 met with a certain measure of success, there were some obvious deficiencies, and some problems encountered in the organisation of agricultural aid in Samara affected the peasants on enclosed and non-enclosed farms alike. One of the deficiencies was associated with the agronomists themselves. A parallel survey to that of the peasants in 1914, revealed that only one quarter of the agronomists in the Province had received a higher education in agricultural science. The majority, who were simply graduates from middle school, were evidently not sufficiently qualified to occupy the positions they held and this was reflected in the quality of their work. Many, for example, had failed to carry out an ecological survey of the section for which they were responsible. All but a few had no long term programme for their section and freely admitted that there was no continuity at all in their work. For the most part each agronomist was familiar with only one or two specific new techniques or methods of farming, such as deep ploughing, seed cleaning or planting, which they would attempt to introduce into their section regardless of the requirements and peculiarities of the individual farms. Finally, it was found that the turnover of agricultural personnel in the zemstvo was very high, presumably due to the low salaries, and indeed one section had no fewer than seven different agronomists during a period of three to four years (59). This reduced

Table 129

Results of Questionnaire Survey of 478 Peasant Farmers in
Samara Province, 1914* (B)

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*Trudy IV-ogo Samarskogo Gubernskogo Agronomicheskogo
Soveshchaniya ... op.cit.

the effectiveness of work, for it is obvious that the longer an agronomist remained in an area the more familiar he was likely to become with its particular needs and, equally important, the more trust and confidence he could instil in the local populace.

Apart from those connected with its personnel, the zemstvo also suffered from problems associated with financing its operations. Although the Samara zemstvo contributed 6.8% of its annual budget to the programme of agricultural assistance, which was considerably more than in the majority of provinces elsewhere in European Russia, many of its agricultural sections lacked the capital to purchase sufficient farm machinery for their warehouses and hiring depots and seeds for distribution to the peasants. In respect of the provision of the material requirements for the improvement of agriculture, however, the peasants on enclosed farms definitely had an advantage over those on the non-enclosed, as the Land Settlement Committee ensured after 1910 that there was a machinery depot and a warehouse established in each section specifically for the use of the former. The Land Settlement Committee's depots were, moreover, usually better stocked than were those of the zemstvo. In Obsharovskiy section of Samarskiy uyezd, for example, where there were only two villages (Grachevka and Borma) that had been enclosed after 1906, the Land Settlement Committee had fifteen seed-drills in its machinery hire depots, while the zemstvo had only five.

Probably the greatest problem that confronted the zemstvo in carrying out its agricultural programme, however, stemmed from the attitude of the peasants. As the questionnaire survey of 1914 revealed, a relatively large number of peasants were not "convinced of the usefulness" of the agronomists and often were hostile or simply apathetic towards many of the proposed plans for farm improvement. The agronomist in Zubtovskiy section of Samarskiy uyezd, for example, returning from a tour of the local villages in 1910, complained that the peasants had shown little interest in his lecture and talks: "I saw that my audience progressively thinned out. Most of the peasants gathered round warm stove in the auditorium and gossiped whilst a few with very bored expressions stayed on to listen to me obviously thinking that it was rude to leave me without any audience at all" (60). Such a complaint was echoed in the reports of many of the other agronomists in the uyezd. Another frequent complaint was that the attempts to introduce improvements such as a new rotation into a village, were often frustrated by the opposition of groups of peasants, usually of those with the least

amount of land: "The landshort elements, who think only of ways of increasing their share of the village's allotment" wrote the agronomists in Koshkinskiy section in 1910, "unfailingly oppose my plans. This element always prevent the introduction of the sorts of improvements that require the agreement of the whole rural society" (61). This partly explains why so many of the agronomists concentrated their attention on the types of improvements, specific farming techniques, that could be introduced on to individual farms and also why a large number of them preferred to work primarily with peasants on the enclosed farms.

Perhaps the clearest evidence of the limitations of the programme of agricultural assistance to peasant farms in Samara Province is provided by an examination of the actual results that were attained on the ground. The zemstvo agricultural department in its annual report of 1913 revealed that, despite a considerable amount of propaganda work, new, rational methods and techniques of farming had, as a result of its activities, been introduced on to less than 10% of the peasant farms in the Province, while a complete reorganisation and reorientation of farming had been effect on hardly any. Taking Samarskiy uyezd, in which, according to contemporary reports, the programme of agricultural assistance was particularly successful and more so than in any other uyezd of the Province, the zemstvo agronomists had succeeded in introducing the use of seed-drills on to only 0.7% of the local farms, early fallow on to 1.1%, seed-sorting on to 0.6% - these figures tell of extremely limited achievements (62). It is significant, however, that according to the zemstvo report among the few farms that had received assistance, a relatively large proportion had been enclosed at some time during the nineteenth century and early twentieth century. Clearly, those parts of Samarskiy uyezd that had been the scene of some enclosure activity, chose to render their assistance primarily to the peasants on the enclosed farms; what few improvements were observed on the enclosed farms in the uyezd were probably, therefore, introduced directly as a result of the activities of the zemstvo agricultural organisation.

NOTES TO CHAPTER VIII

1. Trudy III-ogo Samarskogo Gubernskogo Agronomicheskogo Soveshchaniya 10 - 14 Noyabrya, 1912; In Samarskiy Zemledelets, Samara, 1912, No. 4, p.p. 104 - 108.
2. Slobodchikov, op.cit., 1909.
3. Zemleustroyennyye Khozyaystva, op.cit., 1915.
4. Sbornik Statisticheskikh Svedeniy po Samarskoy Gubernii. Otde'l Khozyaystvennoy Statistiki, Vypusk I. Samarskiy Uyezd. Moscow 1887
Podvornaya Perepis' Krest'yanskikh Khozyaystv Samarskoy Gubernii.
Samarskiy uyezd 1910. Otsenonchno - Statisticheskiy Otde'l Samarskogo Gubernskogo Zemstva, Moscow, 1914.
5. Slobodchikov, op.cit., p.15.
6. Sbornik Statisticheskikh Svedeniy po Samarskoy Gubernii,
op.cit., p. 92.
7. Ibid., p.92.
8. Podvornaya Perepis' Krest'yanskikh Khozyaystv, op.cit., p.84.
9. Sbornik Statisticheskikh Svedeniy, op.cit., p. 90.
10. Ibid., p.p. 92 - 93.
11. Ibid., p. 93.
12. Slobodchikov, op.cit., p.154.
13. Sbornik Statisticheskikh Svedeniy, op.cit., p.92.
14. Ibid., p.93.
15. Ibid., p.93.

16. Trudy Mestnykh Komitetov, op.cit., Tom XXV., p.540
17. Sbornik Statisticheskikh Svedeniy, op.cit., p.93.
18. Ibid., p.92.
19. Ibid., p.93.
20. Ibid., p.93.
21. Ibid., p.p. 94 - 95.
22. Trudy IV-ogo Samarskogo Gubernskogo Agronomicheskogo Soveshchaniya, Samara 1914.
23. Slobodchikov, op.cit., p.156.
24. Trudy Mestnykh Komitetov, op.cit., Tom XXXV., p.49.
25. Slobodchikov, op.cit., appendix I.
26. Ibid., p.p. 59 - 60.
27. Ibid., p.61.
28. Ibid., p.300.
29. Ibid., p.300.
30. Semenov-Tyanshanskiy, op.cit., Tom 6, 1901, Chapter V. gives a detailed description of life in the Mennonite koloniyas.
31. Sbornik Statiticheskikh Svedeniy, op.cit., p.95.
32. Ibid., p.95.

33. Slobodchikov, op.cit., p.202.
34. Ibid., p.69.
35. Ibid., p.69. The farms in question were those of the peasants Barchenkov, Bergtal, Kitsman and Stikov - see Appendix X-1.
36. That of peasant Rudolf - see Appendix X-4.
37. That of peasant Ya. O. Kozmyakov - see Appendix X-4.
38. Belonging to the Kramer brothers - see Appendix X-2 and Table 119.
39. Belonging to A.A. Martinenko - see Appendix X-2 and Table 119.
40. Those of Suits, Tsel, Kitsman, Shitikov and Rizen - see Appendix X-1.
41. For a description of livestock husbandry on the enclosed farms in Samarskiy uyezd see Slobodchikov, op.cit., p.p. 65 - 70. The remarks are summarised in Appendix X.
42. Peasants Shitikov and Rizen - see Appendix X-1.
43. Peasants Tsel, Kitsman and Samsonov - see Appendix X-1.
44. Slobodchikov, op.cit., p.53.
45. Ibid., p.222.
46. Ibid., p.222.
47. Pamyatnaya Knizhka....., op.cit., (1912), p.p. 72 - 73.
48. Ibid., p.74.
49. Trudy Mestnykh Komitetov, op.cit., Tom XXV, p.59.

50. Ibid., p.249.
51. For a description of the activities of the Samara Zemstvo agricultural organisation see Samarskiy Zemledelets, Nos. 1-9, 1910.
52. Otchet o Deyatel'nosti Pravitel'stvennoy Agronomicheskoy Organizatsii v Samarskoy Gubernii za 1910; In Samarskiy Zemledelets, No. 4, 1910, p.p. 300 - 307.
53. Pamyatnaya Knizhka....., op.cit., (1912), p.71.
54. Chto Takoye Agronomicheskaya Pomoshch' i Kak Ona u Nas Organizovana; In Samarskiy Zemledelets, No.3, 1910, P.93.
55. Pamyatnaya Knizhka , op.cit., (1912), p.71.
56. Ibid., p.75.
57. Deyatel'nosti Zemstv po Uluchsheniyu Sel'skokhozyaystva i Podnyatiyu Ekonomicheskogo Blagosostoyaniya Sel'skogo Naseleniya v 1910; In Izvestiya G.U.Z.i.Z., Moscow, 1912, No. 27.
58. Trudy IV-ogo Samarskogo Gubernskogo Soveshchaniya ,op.cit., 1914
59. Zemskaya Agronomicheskaya Organizatsiya Samarskoy Gubernii, eye Sovremennoye Sostoyaniye i Zaprosy; in Ibid, p.p. 34-39.
60. Uchastkovaya Agronomicheskaya Organizatsiya Samarskogo Uyezdnogo Zemstva za 1910, Samara, 1912, p.77.
61. Ibid, p.38.
62. Calculated from figures taken from Uchastkovaya Agronomicheskaya Organizatsiya Samarskogo Uyezdnogo Zemstva, for 1910, 1910 and 1913, Samara, 1910 - 1915.

CHAPTER IX

THE THEORY AND PRACTICE OF THE STOLYPIN LAND REFORM

At the outset it was argued that in order to arrive at some conclusions relating to the significance of the Stolypin Land Reform in the period leading up to the 1917 Revolution in Russia as much consideration should be given to what the measures embodied in the legislation of 1906 - 1914 achieved on the ground as to the intentions of the Government in introducing these measures and their potential impact. The present research into the Reform, involving as it has an investigation of the patterns of adoption of enclosure, the reasons for the patterns observed and the developments that took place on the newly formed farms units, although restricted to only three provinces has, in the author's view, confirmed the validity of such an approach. In each of the Provinces investigated the results of the Stolypin Land Reform turned out in one respect or another to be different from what the Government must have expected and hoped for.

IX - 1. The Concept of the Stolypin Land Reform: its Validity for the Three Provinces

Given the types of problems facing peasant farming in the three Provinces at the beginning of the twentieth century, the basic concepts underlying the Stolypin policy of land reform were fairly sound. The political issue aside, the Government was probably correct in arguing that if the agrarian problem was to be solved a fundamental change had to take place in peasant farming; it was right to attempt to strike at the causes of peasant poverty instead of, as in the past, simply introducing measures aimed at alleviating the symptoms. In Chapter II, it was shown that the system of farming practised in the three Provinces on the eve of the Stolypin Reform, while serving the population well under the conditions of the feudal economy, was not well suited to the demands of a nation undergoing industrialisation. The extensive systems of farming still dominant in peasant communes, whether the three-field system as in the case of Tver and Tula or the long-fallow as in the southern uyezds of Samara, had by the beginning of the twentieth century, not surprisingly, outlived their usefulness

and, what was worse, long since had been the cause of declining productivity. What was required in all three Provinces was the substitution of intensive for the extensive systems: it was only through this that the output of the peasant agricultural sector could be expected to rise and thus meet the new demands put upon it, namely to provide sufficient from the land to feed not only an ever expanding rural population but also the growing urban/industrial labour force.

Following on from the above, the other major premise of the Stolypin Government; that the optimum conditions for the desired intensification of farming were to be found not in the traditional peasant commune but on owner-occupied, consolidated farm units, is more contentious and was challenged at the time as it has been since. Nevertheless, the argument viewed in relation to the situation in the three Provinces would seem to have had foundation.

Again, as was shown in Chapter II, farming conditions in the communes of Tver, Tula and Samara on the eve of the Stolypin Land Reform were far from ideal. In communes of the three Provinces the spatial organisation of the peasants' land was in some way unsatisfactory and all suffered problems arising from the tradition of communal livestock grazing on the arable and of repartitioning. There were without question features of the commune which were in one way or another responsible for the perpetuation of outmoded systems of farming and rendered difficult the introduction of more intensive systems in the three Provinces. Meanwhile, on enclosed farms the peasant was absolutely free to make his own decisions about how he farmed and, moreover, could benefit from his land being held in a single, usually accessible, parcel. This being the case it is difficult not to agree with the Government of the day that conditions for the introduction of intensive systems of farming were far more favourable on the enclosed farms than on farms in the commune. What is questionable is whether it was correct to assume that conditions in the commune were immutable and could not be modified in some way so as to render them also favourable for farm improvement.

On the face of it, however, the policy of land reform put forward by Stolypin would appear to have represented a very real attempt on the part of the Tsarist Government to come to grips with the very causes of peasant poverty. Certainly where the three Provinces were concerned, it provided for the sort of changes that were needed if the standard of peasant farming was to be significantly raised.

IX - 2. The Reality of the Stolypin Land Reform: its Achievement in the Three Provinces

Fundamental to the present work has been the contention that the achievement of the Stolypin Land Reform cannot be assessed simply by looking at the number of peasant households that opted to enclose their land. The method by which enclosure was effected, the nature of the farms formed and, most important, the performance of the farms have been considered as well. Taking these various indicators of achievement together the conclusion that has had to be reached where the three Provinces under investigation are concerned, is that, despite its obvious potential, the Stolypin Land Reform did not meet with unqualified success. Thus in Samara although the percentage number of households that enclosed was, compared with other provinces, very high, few of the farms formed measured up to the expectations of the authors of the Reform either in respect of the spatial organisation of their land or in respect of the system of farming that developed on them. In Tver, in contrast, the enclosed farms were among the most progressive in Russia, a large number were the much preferred khutors and the majority had come into being through communal enclosure; these farms, however, constituted only the barest minority of all in the Province. In Tula, meanwhile, it would not be wrong to conclude that the Reform failed on all counts.

The variability in the results of the Stolypin Land Reform in the three Provinces was found to be due to a combination of different economic, social, environmental and historical factors. In investigating what were these factors and their degree of influence, the fundamental weaknesses of the Stolypin legislation as it applied to the three Provinces have been exposed and it has been possible therefore to reach some tentative conclusions as to why, when it would appear to have been so appropriate a solution to the agrarian problem, the Stolypin Land Reform failed to achieve its purpose. It is also possible to postulate as to whether given more time the results of the Reform would have been significantly different in the three Provinces.

IX - 3. The Stolypin Land Reform as the 'Universal Solution' to the Agrarian Problem

One of the weaknesses of the Stolypin Land Reform to be identified during the course of the investigation of the three Provinces was that the legislators seemed, erroneously, to have viewed the measures passed in 1906 - 1914 as being immediately applicable throughout the whole of European Russia. The evidence would suggest that little attempt was made to determine whether conditions in any given area were ripe for the type of reform proposed or to work out a strategy for the implementation of the various measures that were suited to the area in question. Although in the long term enclosure of the land may have been the answer to the problems confronting peasant farming, this is not to say that everywhere the changes involved could take place over the same period of time or in the same way. In some areas intermediary stages to actual enclosure evidently were required. On this point Witte was very critical of the Stolypin Government arguing that Reform was "strictly the result of bureaucratic work it pretends to solve one of the most important questions of the life of the Empire by means of sixty articles, and attempts to do it throughout the whole vast expanse of this huge Empire with one stroke of the pen" (1). The Government, he argued, should have found out whether conditions were favourable or unfavourable for the development of the enclosure movement in different parts of the Empire and modified its reform accordingly.

The validity of Witte's criticism is more than adequately demonstrated by the experience of the three Provinces. Clearly in both Tver and Tula conditions were not yet suitable for the transition from communal to enclosed farming, while in Samara they were. In the former two Provinces it was found that the very problems that the Government sought to solve with its reform in fact stood in the way of the widespread adoption of enclosure by the peasants: in the first place, the existing distribution of the land of communes was so complex that enclosure of the land of individual households was often rendered impossible, secondly, land-shortage and the consequent poverty of the peasant mass meant that few could afford to enclose and thirdly, the involvement of peasants in off-farm employment meant that many were simply not interested in any type of agrarian reform. Where the first

obstacle was concerned-the complex organisation of commune land - the Government did in fact make some progress with its programme of Group Land Settlement and, as was observed in Chapter III, the number of projects completed was considerable, demonstrating the pressing need for this type of reorganisation. The problem of poverty and the related one of involvement in off-farm employment was more fundamental but in this area the Government did little. Furthermore, since poverty was largely a result of land-shortage, it is evident that with a further decline in the size of peasant landholdings in the future, inevitable in the face of population growth, the likelihood that the tempo of enclosure would increase was remote. Rather it was likely that unless some dramatic change take place the tempo would in fact slow down.

The evidence available for the three Provinces analysed in Chapter V indicates that the propensity to enclose was strongly related to the economic wellbeing of peasants in the commune: the rich were more inclined to enclose than the poor. Thus it was that there was a larger number of enclosures in Samara than in Tver and Tula, while in the latter Province those households that did enclose represented the privileged minority. Since enclosure proved to be an expensive operation the Government would have been well advised to ensure that the peasants in any given area could afford to adopt it. It is not the intention of the author to suggest what measures should have been taken but it is clear that the Government had before it a number of possible alternative courses of action.

First, the Government could have given out grants to all peasants to cover the cost of enclosure and the additional costs incurred in bringing the new farms into productive use. It did, it is true, award loans to peasants who enclosed their land but, as is evident from the investigation of the three Provinces, the level of the loans was generally too low and the number of recipients small. Whether this was due to parsimony on the part of the Government or simply due to a genuine under-estimation of the costs involved in enclosure is not known but, whatever the case, it was obviously a false economy.

A second alternative open to the Government was, in areas where the need was particularly pressing, to have allotted the peasants more land thereby increasing the possibility of their being able to accumulate the capital needed for successful enclosure. To adopt this course of action obviously would have been contrary in spirit to the premise put forward at the time that in order to solve the agrarian problem a fundamental reorganisation of the system of peasant farming was required but it is clear that in some provinces, Tver and Tula being prime examples, short term measures designed to offset immediately the worst features of the crisis were essential before work could proceed on the long term cure.

Finally, an alternative, similar in concept to the above, was for the Government to have concentrated in the first instance on improving the standard of farming and, hence its productivity, in the commune as a preliminary to enclosure, the object being again to put the peasants in a position eventually of being able and indeed wanting to enclose their land. Although the Government was in all probability correct in arguing that certain aspects of the commune did and always would prevent a complete transformation of the system of farming, there was nevertheless much that could be done within the commune to raise the productivity. This was amply illustrated in Tver Province where, as described in Chapter II, there were communes which of their own accord had reduced the number of land parcels pertaining to each household and which had introduced intensive rotations. If such changes had been encouraged instead of being frowned upon by the Government then it is probable that an ever increasing number of peasants would have in time opted to enclose as they gradually became aware that the commune was a bar to further progress. The evidence would suggest that the households that had enclosed by 1914 in Tver, although as yet few in number, were just of this type. Enclosure for them, judging by their subsequent performance, was motivated by a desire to improve further their system of farming. The situation in Tula was somewhat different since here few improvements had been introduced into the commune. It is thus not to be wondered at that a large number of peasants who enclosed in the Province did so only in order to secure for themselves inalienable ownership of their land - this was surely not what the Government wanted.

Had any of these courses of action, and there were probably many others, been followed by the Government it is probable that the enclosure movement would have been more successful in both Tver and Tula Provinces. As it was, however, by attempting to take the shortest and cheapest route to enclosure, the Government probably helped to delay rather than accelerate the process of change in the two Provinces.

The fact that, in contrast to Tver and Tula, the enclosure movement "took off" in Samara, in view of the inflexible attitude of the Government towards its reform, was more a question of luck than of judgement. All the evidence would suggest that in Samara the commune was already in a state of decline, if ever it had properly been established, by 1906. Hence, the main achievement of the Stolypin Reform here was to legalise and accelerate a process that was already under way: it certainly cannot be credited with initiating it.

IX - 4. The Element of Determinism in The Stolypin Land Reform

Apart from its failure to take into consideration the particular needs and requirements of different areas of Russia, the Government of Stolypin in formulating its policy of land reform can be criticised for having adopted what was an essentially deterministic attitude to the question of enclosure and agricultural progress. While it is undoubtedly true, as argued above, that conditions on enclosed farms were far more favourable than in the commune for the development of intensive systems of farming, it does not necessarily follow, as the Government would appear by its actions to have assumed, that enclosure would automatically lead to intensification. Indeed as the experience of the three Provinces described in Chapters VI - VIII showed that the performance of the enclosed farms was extremely variable.

In Tver the available evidence suggests that enclosure was accompanied by a fundamental change in the system of farming practised by the peasants. On the eve of the first world war the enclosed farms in the Province as a group were far more advanced than the normal peasant farms in the commune and already the foundations had been laid on them for the development in the future of a healthy mixed farming economy. The relative success of the enclosed farms in Tver was demonstrated by the fact that the yields they recorded for their major crops were considerably higher than in the commune and that the number that had to depend upon outside sources of income, a common feature in

the Province, was relatively low. In Tula and Samara the picture was very different. In neither Province did any but a small minority of enclosed farms have systems of farming developed on them significantly different from the systems practised in the commune. Moreover, there was no indication that this situation would have changed greatly in the near future. It is true that yields obtained on the enclosed farms were higher in both Provinces than on non-enclosed farms which evidently was due to their owners having adopted certain improvements. The improvements concerned however, were not of the fundamental type urged as necessary by the Government - rather they were of the type that equally well could have been introduced, with the same effect, in the commune, namely, the use of modern agricultural machinery, fertilisers and improved seed. The causal relationship between the system of farming practised and the system of tenure and spatial organisation of land in the three Provinces was very weak indeed.

Judging from the evidence available for the three Provinces, whether a trend towards the intensification of farming developed on the enclosed farms was dependant very largely upon whether a similar trend had already begun before enclosure to develop in the commune. This was only to be expected since, as has been stressed in previous chapters, intensification of farming required that the peasants have the knowledge of new techniques. The difference in the performance of the enclosed farms in Tver on the one hand and those in Tula and Samara on the other can thus be explained. It is surely no coincidence that the enclosed farms in Tver, a Province in which marked changes had already begun to take place in peasant farming long before the Stolypin Land Reform afforded peasants the opportunity to enclose, should have been considerably more progressive than their counterparts in Tula and Samara, the latter both Provinces in which, because of the nature of market forces operating, primitive extensive grain farming was still in the twentieth century the order of the day. It was found, furthermore, that the dominant trends in peasant farming in the commune were in fact magnified on the enclosed farms - whether the changes that took place were for the better obviously depended on the nature of the trends. Thus it was that in Tver, as already observed, the enclosed farms were ahead of the non-enclosed in the transition to a higher system of farming, while in Tula, due to the quest to produce yet more grain, many of the enclosed farms fell behind the non-enclosed with the abandonment of any organised rotation. The case of Tula illustrates the reverse side of the enclosure and agricultural improvement 'coin' - removal of

controls such as were commonly exercised in peasant communes in addition to paving the way for the improvement of farming, created conditions for its degeneration.

The other major factor that was found to have exerted an influence on the type of farming system that developed on the enclosed farms in the three Provinces was the size of their resource base. In all three Provinces changes in farming in the direction of intensification were most commonly observed on the farms which were best endowed with resources, those particularly which had the most favourable man/land ratios. This would explain why in general the large enclosed farms were more progressive than the small, the khutors more progressive than the otrubs and farms on the land of the Peasant Land Bank more progressive than those formed on peasant allotment. Since enclosed farms everywhere were, on average, better endowed with resources than the non-enclosed it is not surprising that a proportionately greater number were recorded as having improved systems of farming even in Provinces such as Tula and Samara. The reason why farms with low man/land ratios should have been the most progressive has already been explained: land abundance increased the probability of peasant farmers being able to make a profit from farming and thus to accumulate the capital needed for the introduction of improvements.

What the investigation of the three Provinces indicated above all was that if farming was to be modernised on the enclosed farms the peasants required both material and non-material assistance. The Government, however, appeared reluctant to invest more than the minimum into setting up programmes to meet this particular need. In none of the Provinces were agricultural advisory services established in the local Land Settlement Committees until three or four years after the passing of the first enclosure legislation and when they were established the range of services they offered and the number of households that benefited from them was limited. Yet experience showed that assistance when rendered was of use and helped steer peasant farming in the right direction. The progress that was observed on some of the enclosed farms, and especially those in 'backward' provinces such as Tula and Samara, can be attributed to the work of the zemstvos or Land Settlement Committees. What the longer term policy of the agricultural advisory services was is not known but judging from what happened on some of the early enclosed farms established by the authorities in Samara the need for constant monitoring of farms' progress was great - left too

long to their own devices some peasants showed a tendency to revert to traditional farming practices even after improvements of various sorts had been introduced.

IX - 5. Concluding Remarks: Enclosure and the Inter- Revolutionary Period in Russia

The impression gained from the detailed investigation of the results of the enclosure movement in three Provinces of European Russia is that the legislation of 1906 - 1911 although conceptually sound, was poorly worked out in detail. Partly because the authors of the enclosure legislation failed to take into account the importance of local peculiarities and needs, and partly because they attempted to implement their measures on a shoe-string, not allocating sufficient money to help the peasants actually at the time of and after enclosure, the results where Tver and Samara were concerned were not as impressive as originally must have been hoped. It would appear that the Stolypin Government in some areas seriously under-estimated the strength of the peasants' affiliation to the commune and the tenacity with which they would, unless directed otherwise, cling on to the system of farming with which they were familiar after enclosure. The evidence suggests that in the three Provinces investigated it would be several decades not several years before the Stolypin Reform would have proved its worth.

So far as it is possible to draw conclusions from the experience of three Provinces, the arguments to the effect that the Stolypin Land Reform came near the solving the agrarian problem and thus to neutralising peasant support of the radical policies being put forward by the various revolutionary parties of the day do not appear well founded. The impact of the Reform on the agrarian problem in the three Provinces can at best be summed up as marginal. For the peasants who did not enclose, and they constituted the majority, the problems arising from land-hunger, rural overpopulation and agricultural under-production remained. But even for those who did enclose the problems were not necessarily solved, while for some they would appear to have worsened. At best a small minority of peasant households can be said to have benefited from the legislation passed in 1906 and there is little evidence to suggest that the number would have increased markedly in the future.

It is appreciated that in order to complete the picture of the significance of the Stolypin Land Reform in the period leading up to the Revolution in Russia further research into other facets of the Reform's results is needed. First, it would be useful to know whether the Government was right in assuming that peasants who enclosed their land would be less receptive to the propaganda of the revolutionary parties than those who remained in the commune - political stability in the countryside was after all one of the main objectives of the Reform. It is generally assumed that, by virtue of the fact, that they were the more prosperous and generally did somewhat better than their non-enclosed neighbours, peasants on the enclosed farms were not militant. It is possible, however, that this assumption is not altogether correct since, as has been found in the present work, there was a fairly significant number of peasants who must have faced a financial crisis as a result of enclosure. In Tula, at least, the number of peasants who were dissatisfied with their enclosed farms was high. Secondly, it would also be useful if it could be established what happened to the enclosed farms after the Revolution. On this question there is considerable disagreement: some authors argue that there was a voluntary and fairly considerable drift back into the commune of peasants who previously had enclosed, while others argued that, despite attempts on the part of the Bolsheviks to reverse it, the enclosure movement gathered momentum. If the trend could be identified much would be added to the Stolypin debate. For the present, however, it is hoped that the present work has gone a little of the way towards answering some of the outstanding questions on the Reform.

NOTE TO CHAPTER IX

1. Quoted from Mosse, *op. cit.*, p. 178

KEY TO SOURCES OF DATA USED IN THE TABLES

The tables were calculated from data taken from the following sources:

1. Sbornik Materialov dlya Otsenki Zemel'Tverskoy Gubernii, Tver 1913 - 1920, Volumes:
 1. Vishnevolotskiy uyezd
 2. Ostashkovskiy uyezd
 3. Rzhevskiy uyezd
 4. Zubtsovskiy uyezd
 5. Staritskiy uyezd
 6. Kashinskiy uyezd
 7. Kalyazinskiy uyezd.
2. Materialy dlya Otsenki Zemel'Tul'skoy Gubernii, Volumes:
 1. Yepifanskiy uyezd, 1914
 4. Bogoroditskiy uyezd, 1914.
3. Zemleustroyennyye Khozyaystva. Svodnyye Dannyye Sploshnogo po 12 Uyezdam Podvornogo Obsledovaniya Khozyaystvennogo Izmeneniya v Pervyye Gody Posle Zemleustroystva. St. Petersburg, 1915.
4. Itogi Otsenonchno-Ekonomicheskogo Issledovaniya Tul'skoy Gubernii
Volume 1. Yepifanskiy uyezd, 1899.
5. Statistika Zemlevladieniya 1905 Goda, St. Petersburg, volumes:
 - XXXII Tula Province
 - XXXV Tver Province
 - XXXVIII Samara Province.
6. Podvornaya Perepis' Krest'yanskikh Khozyaystv Samarskoy Gubernii, Samarskiy uyezd, 1913.
7. Statisticheskoye Opisaniye Rzhevskogo Uyezda, Tver, 1885.

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9. Mozzhukhin, I.V. Zemleustroystvo v Bogoroditskom Uyezde Tul'skoy Gubernii. Moscow, 1917.
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GLOSSARY OF RUSSIAN WORDS USED IN THE TEXT

Arshin - Measure of length equal to 71 cm.

Beloturka - Hard spring wheat.

Bezsrochnaya аренда - Land rent on a contract for an undefined period of time.

Dolgosrochnaya аренда - Land rent on a contract for a long period of time.

Desyatina - Land measure equal to 1.092 hectares.

Guberniya - Administrative province.

Grupповое Zemleustroystvo - Group Land Settlement.

Khutor - An enclosed farm with its owner's residence on it.

Klin - A small parcel of land, usually used for fodder crop or ley grass cultivation, divided off from the main arable.

Kopeyka - (Kopeck) 1/100 of a ruble.

Korennoy peredel - Radical or basic repartition.

Kulak - Originally a village userer who thrived on the poverty of others; later a political term of abuse applied to any peasant who was more prosperous than his neighbour.

Malozemel'ye - Land-hunger or land-shortage.

Mir - Communal assembly of a village.

Muzhik - Peasant (colloquial).

Nadel - Peasant land allotment on Emancipation 1861.

Odnodvoretz - "One-homesteader", state peasant descended from the small servitors settled on the southern frontier in the sixteenth and seventeenth centuries.

Obshchina - Land commune.

Obshchinnoye zemlevladieniye - Communal land tenure.

Otrub - An enclosed farm with the owner's residence located at a distance from the main arable.

Otrubnyye poselki - (otrub-hamlets) Group of otrubs with peasants' dwellings together in a hamlet and their land around but separate from the dwelling.

Otrezki (singular otrezok) - Lands 'cut-off' from the peasants' holdings at the time of Emancipation.

Podvornoye Zemlevladieniya - Hereditary household tenure.

Pud - Weight equal to 36 lbs.

Pustosh' - Abandoned or untilled allotment land.

Pestropol'ye - A way in which the land was cultivated, no fixed succession of crops and no fallow.

Razdelnaya obshchina - Divisional commune, covering only part of a village.

Ruble - Unit of currency worth at its pre-war value 11.2 new pence.

Sazhen - Measure of length equal to 2.13 m.

Sel'skoye Obshchestvo - Rural society.

Sokha - Primitive wooden plough.

Trekhopol'ye - Three-field system of farming.

Uchastkovoye Zemlevladieniye - Unitary Land Settlement or enclosure.

Ukrepleniye v lichnoy sobstvennosti - The transfer of land into hereditary tenure.

Usadba - A residence, here referring to the peasants' dwelling, appurtenances, orchard and kitchen garden.

Uyezd - District or country below the guberniya in the administrative hierarchy.

Verst - Measure of length equal to 1.067 Km.

Volost - Administrative unit within the uyezd.

Yedoki - Consumers, a unit sometimes used for the calculation of the size of peasant allotments.

Zalezhnaya sistema - Long-fallow system of farming.

Zhereberka - Repartition by lot.

Zemstvo - A provincial or district council based on limited franchise and possessed of limited powers.

ABBREVIATIONS USED IN THE TEXT

G.U.Z.i.Z. - Glavnoye Upravleniye Zemleustroystva i Zemledeliya
(The Chief Administration for Land Settlement and
Agriculture).

M.V.D. - Ministerstvo Vnutrennykh Del (The Ministry of Internal
Affairs).

M.Z.i.G.I. - Ministerstvo Zemledeliya i Gosudarstvennykh Imushestv
(The Ministry of Agriculture and State Domains).

Ts.G.I.A.L. - Tzentral'nyy Istoricheskiy Arkhiv v Leningrade
(The Central State Historical Archive in Leningrad).

Ts.S.K. - Tzentral'nyy Statisticheskiy Komitet (The Central
Statistical Committee).

The transliteration system used in the present work is the one
proposed by the United States Board on Geographic Names, reproduced
in Soviet Geography - Review and Transactions.

APPENDIX I

PRINCIPAL SOURCES USED IN RESEARCH

I - 1. The Zemstvo Household Censuses.

The first household census covering a whole uyezd was conducted by the Tambov guberniya zemstvo in 1880 and it was followed by many others conducted by zemstvos throughout European Russia over a period of 35 years to the first world war. The prime movers behind the censuses were the members of the Russian intelligentsia, people close to the revolutionary movement, and their object was to collect data relating to the socio-economic characteristics of the peasant class. They realised that in order to compile a true picture of the conditions of the peasant class it was necessary to direct questions at the peasants themselves and, moreover, to question, not just a sample of households, but every one in every village and commune. In this respect the zemstvo household censuses were unique in Russia and indeed, for their time, in Europe.

Since the whole exercise was not co-ordinated at the centre, the interval of time between census enumerations, the coverage of uyezds and the information collected and the method of its presentation varied between provinces. Thus in Tver the first census was taken between 1883 and 1889 and covered twelve uyezds. This was followed by another census in 1911 - 1913 covering seven uyezds. In Tula Province the first census was in 1899 but covered only one uyezd - Yepifanskiy: later however, between 1910 and 1912 censuses were made of all uyezds. In Samara, meanwhile, the first census, which included all uyezds in the Province, were enumerated in 1883 - 1889 but the later census of 1911 - 1913 covered only two uyezds - Samarskiy and Stavropolskiy. The accompanying table shows the broad groups of questions that were asked at any of the given times by the different zemstvos.

GROUPS OF INFORMATION COLLECTED

Province	Year of census enumeration	Number of uyezds investigated	Groups of information collected															
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
			Population and demography	Literacy	Non-farm employment	Buildings and appurtenances	Farm implements	Livestock	Landownership	Land use	Crops grown	Fertilisers	Yields	Method of working the land	Hire of agricultural workers	Purchase and sale	Credit and debts	Others

Tver	1883 - 1889	12	+	+	+	-	-	+	+	+	+	-	-	-	+	+	-	-
Tver	1911 - 1913	7	+	+	+	x	+	+	+	+	+	x	x	+	+	-	-	-
Tula	1899	1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	-	-
Tula	1911 - 1912	10	+	+	+	+	+	+	+	+	+	x	x	+	+	+	-	-
Samara	1887 - 1889	7	+	+	+	+	+	+	+	+	+	-	-	+	+	-	-	-
Samara	1910 - 1911	2	+	+	+	+	+	+	+	+	+	+	-	-	+	-	-	-

- Key:
- + Recorded
 - x Recorded for a sample of farms
 - Not recorded

Information Recorded in Zemstvo Household Censuses for Tver, Tula and Samara

FOR EACH COMMUNE NUMBER OF ENTRIES UNDER EACH MAIN HEADING

Uyezd	Year of census enumeration	number of separate entries	For each commune data														For whole uyezd data	
			grouped:														grouped:	
			1	2	3	4	5	6	7	8	9-	12	13	14-	accord ing to	number of entries	accord ing to	number of entries
Rzhevskiy	1883	216	42	4	9	2	-	15	67	3	14	-	7	-	-	-	-	
Rzhevskiy	1912	285	32	8	98	-	2	12	49	63	11	6	-	S(15)	26	-	-	
Yepifanskiy	1899	194	25	6	16	6	9	16	39	26	31	3	10	S(9)	308	-	-	
Yepifanskiy	1911	462	37	10	68	6	22	19	126	78	75	-	9	-	-	-	-	
Bogoroditskiy	1911	479	37	10	69	6	22	19	126	78	89	-	9	-	-	-	-	
Samarskiy	1882-1883	68	10	4	4	4	-	12	11	3	2	3	-	-	-	-	-	
Samarskiy	1911	368	28	6	6	-	13	21	39	186	56	-	13	-	-	A(3) S(4) W(4) H(4))))) 324	

Key - Data grouped according to:

- S - size of sown area
- A - size of allotment
- W - number of male workers
- H - size of household
- (n) - number of subdivisions in group.

The earlier censuses tended to be somewhat less detailed than those taken after the turn of the century and also the data collected usually was presented grouped for whole villages or communes (Poobshchinnyye Tablitsy) and for groups of communes (Gruppirovki obshchin). Later many of the zemstvos, in addition, presented data grouped according to other indices - the size of peasant land holding, the area of arable, the social class of peasant, etc. (Grupповые Tablitsy). Again see the accompanying table.

For a detailed description of the history of the zemstvo household censuses and their contents the reader is referred to Svavitskiy, N.A., Zemskiye Podvornyye Perepisi, Gosstatizdat, Moscow, 1961.

I - 2. Mozzhukhin, I.V., Enclosure in Bogoroditskiy Uyezd, Zemleustroystvo v Bogoroditskom Uyezde, Moscow, 1917

The purpose of the investigation conducted during the period 1912 - 1913 by the economist Mozhukhin was to "identify the fundamental type of new peasant farm and to make a note of the most important lines of development on them that were dependant on the form of land tenure" (p.176). With this aim, Mozhukhin conducted a census of a sample of 168 khutors and otrubs in Bogoroditskiy uyezd which was published in 1917 in the form of a written commentary accompanied by 25 pages of tables. The questions asked of the peasants were wide-ranging, covering virtually every aspect of their economy. They were presented in such a way as to make them directly comparable with the household census of the uyezd.

The sample of farms was taken in a small part of the uyezd, in the three southernmost volosts of Nepryadvenskiy, Lyubimovskiy and Nikitskiy. All but one of the 35 khutors investigated were on the land of the Peasant Land Bank but the otrubs were for the most part on former allotment land. The majority of farms had been formed in 1909 although there were some of later origin. The khutors were all clustered around the village of Prudy in Nepryadvenskiy volost, but the otrubs scattered through the three volosts.

It seems unlikely that Mozhukhin was intentionally biased in the selection of farms. He did admittedly present a fairly favourable picture of the farms investigated and sometimes interpreted the figures in his census in an 'over-generous' manner but he had, unlike

the G.U.Z.i.Z. (see below), no particular point to prove and was ready to criticise and note the defects of the farms he studied.

- I - 3. Slobodchikov, D.Ya. (ed)., The Economy of Hereditary Farms and Khutors in Samara Province. An Agricultural Survey. Podvornoye i Khutorskoye Khozyaystvo v Samarskoy Gubernii. Opyt Agronomicheskogo Issledovaniya, Samara 1909.

The investigation into hereditary farms and khutors in Samara Province took place over a one year period in 1908/1909 and was published in the latter year. In all 305 farms were investigated: 80 of which were in Samarskiy uyezd, 159 in Novouzenskiy uyezd and the remainder in the other uyezds of the Province. The farms had very varied origins - some were formed as a result of Government programmes introduced at various times from the beginning of the nineteenth century onwards, others arose spontaneously through peasants purchasing or renting land and yet others, but the minority, as a result of the adoption of the Stolypin Reform.

The purpose of the investigation was to find out whether farms in hereditary tenure and on which the land was consolidated was in any way superior to farms in the commune in respect of the type of farming system that was used. For each farm investigated the following was determined; the size of household, the amount of land owned, rented, land use, livestock and farm implement ownership. In addition any special features of farming on each of the farms was noted. The information was presented in a single volume, the first part of which summarised the main findings and the second gave the returns for each household questioned. Accompanying the volume was a set of plans of various of the farms investigated.

Although the possibility of bias can never be discounted when dealing with samples of farms for which the sampling technique employed is not known, it seems certain that unlike some of the surveys made by the central government this one was by no means biased in favour of the best farms. The main conclusion arrived at by the investigators was that farming on the enclosed farms surveyed was in no way better than in the commune and in some instances inferior.

- I - 4. The Economy of Enclosed Farms - Combined totals of the Household Census of the Economic Changes in 12 Uyezds during the First Years after Enclosure. (Zemleustroyennyye Khozyaystva. Svodnyye Dannyye Sploshnogo po 12 Uyezdam Podvornogo Obsledovaniya Khozyaystvennogo Izmeneniya v Pervyye Gody posle Zemleustoystva, G.U.Z.i.Z., St. Petersburg, 1915)

The investigation was carried out in the autumn of 1913 over a period of 30 - 62 days, the purpose being to find out what changes had taken place on peasant farms which had been enclosed as a result of the adoption of the Stolypin Land Reform. In all 22,399 peasant households were questioned, 19,015 of which were engaged in farming their holdings - the remainder had liquidated their farms or rented them out.

The most important points emerging from reading the G.U.Z.i.Z. report about how and why the investigation was carried out are outlined below:

- a. Although it would have been desirable, the G.U.Z.i.Z. acknowledged that it was impossible to investigate the million or more enclosed farms that had been formed in Russia by 1913 - it therefore decided to take a sample of the total. In taking the sample it was deemed more desirable to investigate all the enclosed farms in a small number of localities rather than to select an equivalent number from widely dispersed locations over the whole of European Russia. Twelve uyezds were thus selected in Russia for detailed investigation and in each all the households which had been enclosed for a period of more than three growing seasons by 1st January 1913 were investigated.
- b. The G.U.Z.i.Z. in its report noted that it had taken special care in the choice of uyezds for investigation; it excluded from the survey any uyezds in which the enclosure movement had failed to take off to any great degree but, at the other extreme, it also excluded those in which enclosure was particularly widespread. Evidently it was seeking to investigate 'average' uyezds and in this way it was hoping to avoid bias. It was laid down that the uyezds chosen should have a variety of different types of enclosed farms and farms of varied origin and, if possible, that they should have established within them either state or zemstvo agricultural aid agencies. The uyezds chosen, the returns of three of which have been used in the present work, were:

Troitskiy - Vilensk Province

Ostrovskiy - Pskov

Sichevskiy - Smolensk

Rzhevskiy - Tver

Mologskiy - Yaroslavl'

Orlovskiy - Orlov

Yepifanskiy - Tula

Bogodukhovskiy - Kharkov

Kremenchugskiy - Poltava

Berdyanskiy - Taurida

Nikolayevskiy - Samara

Krasnoufimskiy - Perm.

c. For each enclosed farm in the above uyezds a separate card was filled in on which there were 150 questions covering the following:

Name of farmer and location of farm;

Number of land parcels constituting the farm;

Size of farm and year of formation;

Land use;

Amount and type of land rented;

Improvements carried out on the farm and grants and aid received for these;

Capital on the farm - buildings, livestock, implements;

Crops cultivated on the arable and rotation in use before and after enclosure;

Branches of farming developed; etc.

d. The G.U.Z.i.Z. was careful in the personnel it appointed to carry out the investigation. In all 282 investigators were employed nearly two-thirds of whom had specialised training in agricultural science and economics. In each uyezd a committee was set up under a 'leader'. The leaders, it was categorically stated, were not members of the local Land Settlement Committees but 'independent (by implication, objective) personages'.

e. The figures collected were not analysed in the uyezds but at the centre by a team in the G.U.Z.i.Z. and the collated results published in 1915. The G.U.Z.i.Z. stated that it would have liked to publish the returns for each farm investigated but this proved not to be possible - the reason was not given (the author unfortunately was not able to locate the respondents cards or the mass of tables and graphs produced at the time by the G.U.Z.i.Z. in the archives). In the published report

tables were produced for each uyezd giving the returns for each group of farms by type (whether khutors, otrubs, etc.) and by origin (whether on allotment, Bank or crown land). Accompanying each set of tables there was a map showing the location of the farms investigated. f. Of all the farms investigated 74.6% had been formed on allotment land and 25.4% on Bank and crown land; and 33.5% were khutors and 66.5% otrubs.

The G.U.Z.i.Z. investigation while a useful source of information on the enclosed farms must be treated with some caution. Dubrovskiy, in particular (see p.p. 270 - 271, 1963) is sceptical of its worth. On the subject of the choice of yezds, Dubrovskiy points out that, despite Government assurances to the contrary, it was biased in favour of those in which the enclosure movement was more successful. This would seem to be true where the three Provinces in the present work are concerned. Of all the yezds in Tver Province, for example, Rzhevskiy had the most enclosed farms - 19.2% of all resident farms compared with the Provincial average of 8.0%. Similarly the percentage number of enclosed farms in Yepifanskiy uyezd was well above average - 25.4% compared with 11.7% for the Province as a whole and the same was true of Nikolayevskiy uyezd - 32.1% as against 23.7%. The yezds selected for investigation would appear to have been those in which there was relatively fertile ground for the adoption of enclosure.

Dubrovskiy further points out that the fact that all the detailed analysis of the data collected took place at the centre rather than in the yezds themselves afforded the G.U.Z.i.Z. an opportunity to mis-represent the findings: "There was no guarantee" he argued, "that the published statistical results were correct" (p.270). It seems unlikely, however, that the G.U.Z.i.Z. would actually falsify any of the figures it received from the uyezd committees but possibly the data was presented in such a way as to present the most favourable picture. It is noteworthy that, although it had every opportunity to do so, the G.U.Z.i.Z. did not present any of the returns by the size of farm so it is not possible to determine what sort of differences existed between the farms investigated nor did the G.U.Z.i.Z. reveal their man/land ratios. Also, although the information was collected, for many aspects of farming data were not released concerning the pre-enclosure situation. The changes that must have taken place in the pattern of land use and the types of crops grown on the land after enclosure are not known.

Another point worthy of note is that one-third of the enclosed farms investigated by the G.U.Z.i.Z. were khutors. In effect, as consultation of figures for the whole of European Russia shows, khutors were far less numerous - but khutors everywhere tended to be more successful than otrubs. Also a disproportionately large number of farms formed on the estates of the Peasant Land Bank were investigated (25.4% of the sample as against 20.6% for European Russia as a whole) and again these farms had a particularly good record.

It appears certain therefore that the uyezds chosen for the investigation were probably not representative of the 'average' situation and it is possible that the way in which the data collected was presented and the information released might not have given a true representation of the situation on the enclosed farms of European Russia.

I - 5. The Witte Commission: The Special Committee on the Needs of the Agricultural Industry (Osoboye Soveshchaniye o Nuzhdakh Sel'skokhozyaystvennoy Promyshlennosti)

The Special Committee on the Needs of the Agricultural Industry was established under the chairmanship of Count Sergei Witte, former Minister of Finance but in honorary retirement in 1902. The purpose of the Committee was to investigate conditions of farming in all provinces of European Russia and to come up with recommendations for methods of solving the agrarian crisis. Its foundation shows that the Government was by the twentieth century aware of the potentially dangerous situation in the countryside and was seeking ways of avoiding disturbances in the future. Dubrovskiy has argued (p.p. 72-86, 1963) that the establishment of the Committee was a direct consequence of recent peasant uprisings in Poltava and Kharkov provinces.

In order to carry out the investigation 618 local Committees were set up in Russia - 82 provincial and 536 in separate uyezds - and no less than 12,000 people engaged on various terms. Of those involved in making reports collating results and putting forward recommendations only 2% were drawn from the peasant class - the bulk were landowners and Government officials. This, according to Dubrovskiy, had a marked effect on the way in which the work of the Committees was organised and on the conclusions finally arrived at. Each Committee developed its own method of investigation but the questions to which answers were sought were everywhere the same - the most important concerned the

legal position of the peasants, the reasons for rural poverty and unrest, the features of communal tenure, the activities of the Peasant Land Bank and zemstvo agricultural offices, land-shortage and rent, agricultural techniques and the system of farming. The findings of each committee were sent to the central Committee where they were summarised. Over the course of three years more than 50 volumes of the findings were published. The first volumes contained the detailed reports of the individual committees - Trudy Mestnykh Komitetov o Nuzhdakh Sel'skokhozyaystvennoy Promyshlennosti - and the latter summarised the findings on a topical basis - Svod Trudov Mestnykh Komitetov o Nuzhdakh Sel'skokhozyaystvennoy Promyshlennosti.

Relevant in the context of the present work are the conclusions the Committees came to on the question of the communal system of tenure and farming. The majority of the Committees found that the commune was at the root of the problems faced by the peasantry and they recommended that peasant households wanting to withdraw from the commune should be entitled to do so. The formation of khutors it was agreed was desirable, but, interestingly all the Committees stressed that they should be allowed to evolve and should not be forced on the peasants. Nevertheless, in pointing out the shortcomings of communal tenure, the Witte Commission obviously played an important role in shaping the agricultural policy of the Stolypin Government.

APPENDIX II

LAND SETTLEMENT IN EUROPEAN RUSSIA

Region	Transfer from communal to hereditary tenure 1906-1915*	% No. house-holds in region	% amount of peasant land in region	% of all house-holds involved in land settlement which enclosed land**	Land Settlement work on Peasant Allotment Land and the Land of the Peasant Land Bank and Crown				% enclosed farms on allotment khutors *****	
					Of all enclosed farms % formed on land of***		Of khutors and otrubs formed on allotment land % through:****			
					peasant communes	P.L.B.	Crown	communal enclosure		individual enclosure
Central Chernozem	26.7	15.6	33.3	66.9	31.7	1.4	42.4	46.7	10.9	8.5
Middle Volga	18.6	10.2	33.7	69.8	29.0	1.2	30.0	64.7	5.3	4.5
Lower Volga	33.1	15.8	75.9	91.5	7.4	1.1	34.6	64.8	0.6	6.7
Steppe-Ukraine	45.6	36.5	80.5	83.6	11.6	4.8	65.6	30.0	4.3	36.6
Right-Bank Ukraine	48.6	50.7	70.2	75.8	24.0	0.2	78.6	0.1	21.3	3.3
Lef-Bank Ukraine	20.5	15.9	57.8	80.4	19.3	0.3	70.6	14.4	15.0	2.3
Central Industrial	16.2	12.3	23.6	90.3	9.6	0.1	77.2	18.8	4.0	1.2
Belo Russia	32.6	29.1	86.7	84.0	15.7	0.3	91.7	5.7	2.6	63.4
Lakes	12.9	8.4	61.5	93.1	6.5	0.4	85.6	9.5	4.9	35.6
Pre-Urals	4.5	3.5	28.9	87.3	11.4	1.3	52.4	44.3	3.3	12.8
Northern	6.5	3.7	16.0	99.1	0.7	0.2	71.9	22.0	6.1	11.1
Av. for non-chernozem	13.8	9.1	42.5	89.0	10.7	0.3	75.7	20.0	4.3	25.6
Av. for chernozem	27.7	17.7	51.8	76.2	22.0	1.8	53.6	36.8	9.6	19.2
Av. for 40 provinces in European Russia	21.1	14.0	49.0	79.4	19.1	1.5	64.6	28.6	6.8	22.4

For Provinces included in each region see Figure 1, p.

* Dubrovskiy, p.p.574-576
** Dubrovskiy, p.p.582-584
*** Dubrovskiy, p.p.585-588
**** Dubrovskiy, p.p.589-591
***** Dubrovskiy, p.p.589-591 (figures not available for all provinces)

APPENDIX III

THE CALCULATION OF THE OPTIMUM SIZE OF PEASANT FARM BY THE PEASANT LAND BANK

(Ekonomicheskoye Opisaniye Zemledel'cheskikh Rayonov Rossii po Guberniyami dlya Opredeleniya Dushevykh Norm Zemel'nykh Nadelov, Gosudarstvennyy Krest'yanskiy Pozemel'nyy Bank., Ts.G.I.A.L.; Fond 529, opis 44, delo 365)

The figures referred to in the text (p. 73) were arrived at in the following way:

For Tver and other provinces in the mixed forest belt:

The principal constraints on peasant farming in the region were noted by the Peasant Land Bank as being: the cold climate with a short growing season and infertile soils requiring constant fertilisation. These constraints made themselves felt on the amount and type of land a single work-team (tiaglo) - man and wife - could farm in the following way:

1. A maximum of 6 desyatinas of arable could be worked in any given year - from the beginning of spring to 20th June, 2 desyatinas of land could be prepared for and sown with the spring crop and 2 desyatinas of fallow ploughed, from 15th July to 1st August, working at maximum strength, 2 desyatinas of winter rye could be harvested (the period before the harvest had to be devoted to the collection of hay) and 2 desyatinas of fallow planted with the winter crop and the spring field harvested and the remaining hay crop harvested. No alteration to this regime could be made in view of the timing necessary for sowing and harvesting imposed by the climate.
2. To fertilise 2 desyatinas of fallow each year approximately 2,400 puds of manure were required which could be produced by 6 head of large livestock. To feed 6 head of livestock for the necessary 200 - 210 days of stall feeding 600 puds of hay had to be produced. At current yields of 60 puds per desyatina this could be obtained from 10 desyatinas of hayland. The need to harvest each year 10 desyatinas of hay was one of the constraints on the amount of time the peasants could spend on

their arable.

3. For the maintenance in the summer of 6 head of livestock 6 desyatinas of pasture were required. Since, however, there were limited quantities of pasture in the region, forest, which was less productive, had to be used as a substitute in part. In all it was calculated that 10 desyatinas of pasture plus wood were required.

4. The total amount of land needed on peasant households consisting of one man and his wife thus came to 26 desyatinas, 20 of which was to be devoted to hay, pasture and wood. This latter was essential, so the Peasant Land Bank argued, if the arable was to be properly fertilised.

Tula and other provinces of the northern black-earth belt:

The special conditions noted by the Peasant Land Bank in this region were: fertile soils requiring in their natural state relatively little fertilisation, a favourable climate with a long growing season, and the relative absence of natural sources of livestock grazing land and hayland. Given the length of the working season and the type of tasks that had to be fulfilled on farms in this region a working team, again of a man and his wife, could according to the Peasant Land Bank plough, plant and harvest 12 desyatinas of land:

1. During the period 18th April - 1st May, 2-3 desyatinas of arable could be sown with early spring grains and the period 1st - 20th 2 desyatinas with later spring grains.
2. During the period 1st June to 23rd, 4 desyatinas could be ploughed for the following year's winter crops. The intervening period between the sowing of the spring grain and the ploughing of the fallow was taken up with the beginning of the hay harvest.
3. From 23rd June to 6th July the hay harvest would continue, to be followed from 16th July to 6th August by the harvest of the winter grains and the preparation of fallow. Taking into account feast days during which no work was done, a working team could harvest 4 desyatinas of winter rye and the early spring grain. The remainder of the spring grain could be harvested in the period 6th - 25th August and at the same time the winter field sown. The principal constraint on the amount of land the peasants had under arable was governed by the amount of rye they could harvest during the critical period. The Bank concluded on the basis of the above that 12 desyatinas of arable was the maximum amount

of land with which a single working team could cope under the three-field system.

4. The Bank argued that it was desirable to have a substantial area of hay and pastureland but since this was simply not available in the Province it did not trouble to recommend a set amount. Merely, it noted, that, given the existing extent of hay and pasture, it was possible for each working team to have no more than 2 desyatinas on average. The harvest of the hay took place between the sowing of the spring grain and ploughing of the fallow and between the end of ploughing and the beginning of the rye harvest. There was ample time for the area involved to be harvested at leisure. The Bank justified its position thus: "It is not possible to lay down a norm for non-arable land all additions to the norm defined for the arable must be related to the availability of the particular types of land and cannot be considered in isolation".

5. The final size of holding arrived at was therefore 14 desyatinas the greater part of which was arable.

APPENDIX IV

AVERAGE ANNUAL INCREASE IN GRAIN YIELDS IN PUDS PER DESYATINA ON
PEASANT LAND IN 50 PROVINCES OF RUSSIA 1883 - 1915 *

Province	Winter Rye	Spring Wheat	Spring Oats
Archangel	0.118	-	0.115
Astrakhan	0.175	0.250	0.330
Bessarabia	0.434	0.197	0.870
Chernizov	0.455	1.036	0.466
Don Oblast	0.022	0.097	0.472
Grodno	0.674	0.836	0.738
Kazan	0.458	0.226	0.194
Kaluga	0.024	-	0.235
Khatkov	0.083	0.769	1.136
Kherson	0.954	0.300	0.658
Kiev	0.213	0.934	1.108
Koven	0.578	0.394	0.594
Kostroma	0.101	0.089	0.395
Kurgland	0.139	0.174	0.593
Kursk	0.746	0.796	0.850
Lifland	0.642	0.098	0.366
Minsk	0.642	0.467	0.583
Mogilev	0.443	0.420	0.272
Moscow	0.335	-	0.515
Nizhnegorod	0.144	0.294	0.278
Novgorod	0.193	0.039	0.206
Olonets	0.180	-	0.227
Orenburg	0.050	0.136	0.178
Orlov	0.190	-	0.392
Penza	0.133	0.279	0.251
Perm	0.707	0.784	0.506
Padol'sk	1.176	0.496	1.506
Poltava	1.076	0.616	1.053
Pskov	0.408	0.314	0.078

Province	Winter Rye	Spring Wheat	Spring Oats
Ryazan	0.195	0.751	0.528
Samara	0.187	0.179	0.133
St. Petersburg	0.324	-	0.308
Saratov	0.003	0.085	0.041
Simbirsk	0.316	0.053	0.089
Smolensk	0.363	0.449	0.395
Taurida	0.477	0.259	0.647
Tambov	0.125	-	0.567
Tver	0.060	0.232	0.298
Tula	0.101	-	0.419
Ufa	0.674	0.203	0.194
Vilen	0.449	0.488	0.482
Vitebsk	0.260	0.145	0.045
Vladimir	0.212	0.517	0.548
Vologda	0.100	0.076	0.180
Volin	0.992	0.476	1.073
Voronezh	0.417	0.643	0.663
Vyatka	0.427	0.453	0.418
Yekaterinoslav	0.967	0.623	0.925
Yestlyan	1.025	0.640	0.570
Yaroslavl	0.067	0.128	0.132

*After Groman, V.G., Vliyaniye Neurozhayev na Narodnoye Khozyaystvo Rossii. Moscow, 1927. Pt.1, p.52.

APPENDIX V

THE PEASANT - INDUSTRIAL WORKERS OF PRE-REVOLUTIONARY RUSSIA

The new class of peasant - industrial workers which emerged in Russia in the nineteenth century was highly varied and several attempts have been made by authors to establish a typology. Of the various classifications, probably the best, and certainly most useful, is that devised by Lenin in the Development of Capitalism in Russia. According to Lenin, six categories of peasant household belonging to the 'new class' could be identified by the end of the nineteenth century. These were:

- households which combined subsistence farming with the production of handicrafts (remesli), the latter primarily for the household's own use, but sometimes also used in primitive exchange with neighbouring households.
- households which combined subsistence farming with domestic industrial production (promisli). An extension of the above, such households manufactured products primarily for sale in exchange for money on the market.
- households which combined subsistence farming with domestic industrial production on capitalist lines. These households were different from both of the above groups in that domestic manufacture was undertaken not so much out of necessity as out of the desire to make sizeable profits and, moreover, was performed very often by hired workers in addition to some family members.
- households which combined subsistence farming with work in industry or on estates. In this group some members of the household would go out to work away from home, leaving the rest of the family, often just the aged and infirm and very young to till the land for most of the year. Such labour excursions were characteristically of a temporary nature, the peasants involved returning to their villages with their earnings at the time of harvest.

- households which had abandoned their holdings altogether, returning their allotments to the commune or renting them out to co-villagers at a nominal price, and which joined permanently the ranks of the proletariat.
- households which combined commercial agricultural production with commercial industrial production. Such were not numerous and were drawn from the richest members of peasant society. They employed a relatively large number of workers and constructed purpose-built premises on their land for industrial production.

OFFICIAL STATISTICS OF G.U.Z.i.Z. FOR THE THREE PROVINCES

VI - 1. Tenure changes attendant on Land Settlement

Nature of Land Settlement Project and Province	Transfer to Hereditary Tenure					Retention of Communal Tenure			
	1 Distribution of households in %	2 Distribution of land in %	3 % No. households to total in group	4 % amount of land to total in group	5 % amount of land remaining in commune use	6 Distribution of households in %	7 Distribution of land in %	8 % No. households to total in group	9 % amount of land to total in group
<u>TVER</u>									
<u>Unitary Land Settlement:</u>									
1. Communal enclosure	42.1	49.6	99.7	99.9	10.5	0.1	0.02	0.3	0.1
2. Individual enclosure	42.4	40.3	100.0	100.0	0.2	0.0	0.0	0.0	0.0
<u>Group Land Settlement:</u>									
1. Redistribution of land between villages	1.8	1.7	1.3	0.1	0.02	54.5	57.8	98.7	98.6
2. Allotment of land to hamlets from village land	8.3	4.3	12.7	2.2	0.1	23.0	24.5	87.3	93.6
3. Redistribution of land between different categories of owners	1.5	0.6	7.1	0.0	0.1	7.7	3.0	92.9	75.3
4. Division of land held in common between separate landowners	0.4	0.1	9.1	0.0	0.0	1.6	0.04	90.9	47.8
5. Demarkation of boundaries between separate landowners	1.7	1.6	5.4	0.0	0.1	12.4	14.0	94.6	95.7
6. Others	1.8	1.8	51.9	25.4	2.1	0.6	0.6	48.1	23.9
Average total	100.0	100.0	28.9	47.9	1.5	100.0	100.0	71.1	70.9
<u>TULA</u>									
<u>Unitary Land Settlement:</u>									
1. Communal enclosure	88.6	87.3	99.9	99.9	12.3	0.0	0.04	0.1	0.1
2. Individual enclosure	11.0	12.3	100.0	100.0	0.6	0.0	0.0	0.0	0.0
<u>Group Land Settlement:</u>									
1. Redistribution of land between villages	0.2	0.1	0.1	0.1	0.0	95.7	95.4	99.9	99.9
2. Allotment of land to hamlets from village land	0.1	0.1	1.6	2.2	0.8	2.8	5.5	98.4	97.8
3. Redistribution of land between different categories of owners	0.0	0.0	0.0	0.0	0.0	1.2	0.5	100.0	100.0

Nature of Land Settlement Project and Province	Transfer to Hereditary Tenure				Retention of Communal Tenure			
	Distribution of households in %	Distribution of land in %	% No. households to total in group	% amount of land to total in group	% amount land remaining in commune use	Distribution of households in %	Distribution of land in %	% No. households to total in group
	1	2	3	4	5	6	7	8
								9
TULA - continued								
4. Division of land held in common between separate landowners	0.0	0.0	0.0	0.0	0.0	0.2	0.2	100.0
5. Demarkation of boundaries between separate landowners	0.0	0.0	0.0	0.0	0.0	0.1	0.2	100.0
6. Others	0.2	0.2	100.0	25.4	2.5	0.0	0.0	74.6
Average total	100.0	100.0	34.7	47.9	5.2	100.0	100.0	52.1
SAMARA								
Unitary Land Settlement:								
1. Communal enclosure	60.0	65.0	99.9	99.9	13.9	0.1	0.2	0.1
2. Individual enclosure	39.0	34.0	100.0	99.8	16.1	0.0	0.0	0.2
Group Land Settlement:								
1. Redistribution of land between villages	0.5	0.5	4.4	8.9	21.1	85.6	77.6	91.1
2. Allotment of land to hamlets from village land	0.0	0.0	0.0	0.0	0.0	7.1	10.1	100.0
3. Redistribution of land between different categories of owners	0.1	0.0	36.4	8.5	0.0	0.8	0.4	91.5
4. Division of land held in common between separate landowners	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. Demarkation of boundaries between separate landowners	0.4	0.6	30.2	42.4	0.0	8.2	11.7	57.6
6. Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average total	100.0	100.0	88.5	93.8	14.6	100.0	100.0	6.2

* Otchetnyye Svedeniya o Deyatel'nosti zemleustroyennykh Kommissi po I yanvarya 1916, St. Petersburg, 1917.

VI - 2. Group Land Settlement in Tver and Tula Provinces by Uyezds
1906 - 1917*

% Number households involved in given type of project:						
Province and Uyezd	Redis-tribution of land between villages	Allotment of land to hamlets in village	Redis-tribution of land between different types of landowners	Division of land held in common between separate landowners	Demar-kation of boundaries between separate landowners	Others
	1	2	3	4	5	6
<u>TVER</u>						
Bezhet'skiy	98.6	1.2	0.2	0.0	0.0	0.0
Vesegon'skiy	89.4	3.2	7.3	0.0	0.0	0.1
Vishnevolut'skiy	96.2	3.5	0.0	0.0	0.3	0.0
Zubtov'skiy	91.4	4.6	3.9	0.0	0.0	0.1
Kalyazin'skiy	97.0	0.0	0.0	3.0	0.0	0.0
Kashin'skiy	97.9	0.0	0.0	0.2	1.9	0.0
Korchev'skiy	99.9	0.1	0.0	0.0	0.0	0.0
Novotorzh'skiy	37.0	55.8	3.4	0.0	3.7	0.1
Ostashkov'skiy	96.3	0.0	0.8	0.0	2.9	0.0
Rzhev'skiy	46.4	53.6	0.0	0.0	0.0	0.0
Starits'skiy	99.2	0.8	0.0	0.0	0.0	0.0
Tvers'skiy	94.7	0.2	1.7	1.2	1.2	1.0
Province	95.3	2.5	1.2	0.2	0.6	0.1
<u>TULA</u>						
Aleksin'skiy	74.0	0.0	8.7	0.0	16.5	0.8
Bogorodits'skiy	50.0	26.9	6.6	5.0	11.1	0.4
Venev'skiy	43.5	22.2	3.2	0.0	24.9	6.2
Belev'skiy	22.2	59.1	5.4	1.1	12.2	0.0
Yepifan'skiy	32.0	29.4	18.4	0.0	20.2	0.0
Krapivens'skiy	75.5	12.8	1.6	0.0	10.1	0.0
Odoyev'skiy	86.8	0.0	4.5	0.0	8.6	0.1
Tul'skiy	18.1	74.1	4.8	0.0	3.0	0.0
Yefremov'skiy	71.4	5.9	10.6	0.0	12.1	0.0
Chern'skiy	54.9	16.2	3.8	0.2	8.3	16.6
Province	51.8	23.1	7.7	2.2	12.7	2.5

*Otchetnyye Svedeniya op.cit.

APPENDIX VII

HEREDITARY FAMILY HOLDINGS IN PETROPAVLOVSKIY VOLOST - RETURNS
FOR INDIVIDUAL VILLAGES

VII - 1. Distribution of Crops (6)

Name of village	% of sown land under:						
	winter rye	spring wheat	spring oats	barley	millet	potatoes	others
Vvedenka	43.4	49.8	5.9	-	-	-	0.9
Oserki	40.0	50.7	8.0	-	-	0.3	1.0
Vladimirovka	36.1	55.2	8.4	-	-	-	0.3
Rozhdestvenka	36.3	55.9	7.5	-	-	-	0.3
Rizhovka	30.0	68.7	-	-	-	-	1.3
Dmitriyevka	33.6	65.0	-	-	0.2	0.1	1.1
Preobrazhenka	35.1	59.0	4.5	0.2	-	-	1.2
Liverka	37.6	58.9	2.8	-	-	-	0.7
Berezovka	30.9	61.9	5.8	-	-	-	0.9
Mikhaylovka	38.3	58.4	1.9	-	-	0.5	1.4
Svetlovka	33.3	58.3	6.9	-	-	-	1.5
Kazachya	26.0	61.0	10.0	0.3	0.2	0.2	3.3
Zabolotskaya	31.9	60.1	8.0	-	-	-	-
Visarionov	41.7	54.2	4.1	-	-	-	-
Abdeyev	no data						
Polnaya	no data						
Znamenka	40.0	50.6	8.2	-	-	-	1.2
Brusovka	40.5	51.4	7.4	-	0.4	0.1	0.2

VII - 2. Livestock (6) - see over

VII - 2. Livestock (6)

Name of village	Per household in village number of:				Percentage of farms without horses
	horses	cows	sheep	pigs	
Vvedenka	2.3	1.4	4.3	0.4	4.9
Ozerki	2.5	1.4	3.3	0.2	0.0
Vladimirovka	1.8	1.2	3.0	0.1	4.6
Rozhdestvenka	2.3	1.1	4.3	0.2	2.9
Rizhovka	2.1	1.4	3.6	0.2	0.0
Dmitriyevka	2.5	1.7	4.7	0.6	3.8
Preobrazhenka	2.5	2.0	8.2	0.6	4.2
Liverka	2.3	1.2	3.4	0.7	0.0
Berezovka	2.9	1.6	4.8	0.7	2.6
Mikhaylovka	3.3	2.0	5.7	1.3	4.3
Svetlovka	2.1	1.4	2.6	0.5	5.9
Kazachya	0.2	1.5	4.1	0.2	0.0
Zabolotskaya	2.7	1.7	5.7	0.7	0.0
Visarionov	3.7	3.0	5.7	1.7	0.0
Abdeyev	no data				
Polnaya	no data				
Znamenka	2.1	1.5	5.4	0.2	13.8
Brusovka	3.3	1.7	5.6	1.4	2.8

APPENDIX VIII

MENNONITE FARMS IN SAMARSKIY UYEZD - RETURNS FOR INDIVIDUAL

HOUSEHOLDS (11)

NAME OF VOLOST AND MENNONITE FARMER	No. of land parcels per farm	Size of farm in desyatinas	No. of desyatinas of arable per head of population	Usadba			pasture and wood	single share plough	double share plough	multiple share plough	seed-drill (simple)	seed-drill (regulated)	harvester	threshing machine	cattle	sheep	pigs	horses	oxen
				arable	hay	pasture and wood													
MARIENTAL																			
50-100 des.																			
G.Ya. Neiman	1	50	5.6	2.0	80.0	8.0	10.0	s	a	m	e	-	-	1	8.1	-	5.0	2.3	-
H.P. Fast	1	65	9.3	1.5	86.1	4.6	7.7	s	a	m	e	-	-	1	6.8	4	3.2	7.2	-
E.I. Yansen	1	65	9.3	1.5	83.1	7.7	7.7	s	a	m	e	1	1	2	10.3	-	3.3	9.3	-
G.Ya. Fast	1	65	12.8	1.5	78.1	7.7	12.5	s	a	m	e	1	-	1	9.6	-	2.0	8.2	-
100 des.																			
B.B. Rizen	1	170	28.3	0.6	85.3	7.6	6.5	s	a	m	e	1	1	3	10.1	-	7.0	19.5	-
Ya Ya Tebs	1	130	21.7	0.8	91.5	3.85	3.85	s	a	m	e	-	-	2	8.4	-	3.2	20.3	-
G.G. Yansen	1	162	27.0	0.6	86.4	6.2	6.8	s	a	m	e	-	-	2	8.1	-	2.2	20.2	-
E.Ya. Reger	1	230	28.7	0.9	81.7	6.5	10.9	s	a	m	e	1	1	3	7.6	-	2.0	23.7	-
B.B. Van-Vergen	1	189	37.8	1.1	77.8	11.1	10.1	s	a	m	e	-	-	2	17.7	-	2.3	18.3	-
GROTSFELD																			
50-100 des.																			
G. Rizen	1	97	19.0	-	83.5	8.25	8.25	s	a	m	e	-	-	2	8.1	-	4.0	18.6	-
100 des.																			
Yd. Rizen	1	130	26.0	-	65.4	7.7	26.9	-	72.2	6.2	21.6	1	1	2	16.1	-	6.0	23.4	-
Ya Ya Rizen	2	195	39.0	-	84.6	7.8	7.8	s	a	m	e	1	1	3	10.1	4	4.0	28.8	-
I.I. Vibe	2	130	32.5	-	65.4	7.7	26.9	-	72.2	6.2	21.6	1	1	2	12.1	-	8.0	24.6	-
K.D. Gamm	1	195	27.9	-	84.6	7.8	7.8	s	a	m	e	-	-	3	12.1	-	4.0	24.8	-
ORLOV																			
30-50 des.																			
T. Vizner	N.D.	32	5.3	-	84.4	-	15.6	s	a	m	e	1	-	1	8.4	1	3.0	4.2	-
D. Klassen	N.D.	32	32.0	-	84.4	-	15.6	s	a	m	e	-	-	1	7.1	-	2.0	4.1	-
Ya. Kliver	N.D.	32	8.0	-	84.4	-	15.6	s	a	m	e	-	-	-	5.1	-	3.0	1.0	-
50-100 des.																			
E. Gerts	N.D.	95	85.0	-	89.5	-	10.5	s	a	m	e	-	-	-	8.1	-	-	11.0	-
P.M. Dik	N.D.	64	7.1	-	84.4	-	15.6	s	a	m	e	-	-	2	6.7	1	-	11.4	-
100 des.																			
Bridiger	N.D.	230	38.3	-	94.5	-	6.5	s	a	m	e	-	-	2	12.1	-	5.0	18.2	-

LAND USE

FARM IMPLEMENTS

LAND USE

LAND

OWNER-
SHIP
No. of land parcels per farm
Size of farm in desyatinas
No. of desyatinas of arable
per head of population
Usadba
arable
hay
pasture and wood
usadba
arable
hay
pasture and wood
single share plough
double share plough
multiple share plough
seed-drill (simple)
seed-drill (regulated)
harvester
threshing machine
cattle
sheep
pigs
horses
oxen

Per farm number of

Per farm number of

No. of land parcels per farm

Size of farm in desyatinas

No. of desyatinas of arable

per head of population

Usadba

arable

hay

pasture and wood

usadba

arable

hay

pasture and wood

single share plough

double share plough

multiple share plough

seed-drill (simple)

seed-drill (regulated)

harvester

threshing machine

cattle

sheep

pigs

horses

oxen

NAME OF VOLOST
AND MENNONITE
FARMER

MURAVEVKA

30-50 des.

M. Ketler

D. Dik

A. Reimer

50-100 des.

P. Ketler

100 des.

A. Gerts

Ya. Gamm

LIBENTAL

50-100 des.

I.B. Rizen

A.A. Fleiman

A. Penner

100 des.

I.P. Bergman

ALEKSADRATAL

G.I. Izak

K. Ekk

30-50 des.

G.G. Penner

50-100des.

P.G. Dik

G.G. Ediger

P.D. Reismar

G.P. Dik

G.G. Franks

100 des.

G.G. Peters

A. Ya Tebs

P.P. Dik

P.M. Reimer

NAME OF VOLOST AND MENNONITE FARMER	No. of land parcels per farm	Size of farm in desyatinas	SHIP	LAND USE				FARM IMPLEMENTS										LIVESTOCK				
				No. of desyatinas of arable per head of population	% of own land		% of all land in use (own and rented)		multiple share plough	seed-drill (simple)	seed-drill (regulated)	harvester	threshing machine	cattle	sheep	pigs	horses	oxen				
					usadba	arable	hay	pasture and wood											usadba	arable	hay	pasture and wood
<u>NEIGOFNUNG</u>																						
G. Runk	2	11.5	2.9	8.7	60.9	4.3	26.1	s	a	m	e	-	-	-	-	1	10.7	0	2.2	4.2	-	
50-100 des.																						
P.A. Garder	2	70.5	23.5	3.5	82.3	-	14.2	s	a	m	e	-	-	-	-	1	7.3	3	3.3	7.2	-	
P. Ekk	2	65.0	65.0	1.5	75.4	7.7	15.4	s	a	m	e	-	-	-	-	1	10.8	3	3.0	7.2	-	
K.D. Gamm	1	71.0	14.2	1.4	84.5	7.0	7.0	s	a	m	e	-	-	-	-	1	7.4	2	3.2	8.0	-	
I.Ya.Van Bergen	2	65.0	21.7	1.5	83.1	7.7	7.7	0.8	91.5	3.8	3.8	-	-	-	-	1	8.1	-	3.3	12.3	-	
I.D. Rizen	1	65	13.0	1.5	80.0	9.2	9.2	s	a	m	e	-	-	-	-	1	8.9	4	3.0	7.0	-	
K. Frantsen	2	70	8.7	1.4	71.4	12.9	14.3	s	a	m	e	-	-	-	-	1	11.1	6	5.5	10.2	-	
100 des.																						
Ya Ya Gein	4	312	78.0	0.6	85.9	6.4	7.1	s	a	m	e	-	-	-	-	1	10.3	4	3.3	39.4	-	
I.B. Ganter	3	154	51.3	1.3	82.5	7.8	8.4	s	a	m	e	2	6	1	1	1	12.1	4	2.3	30.6	-	
B.P. Tebs	2	140	70.0	0.7	82.1	5.7	11.4	s	a	m	e	-	3	-	1	1	11.3	6	-	12.1	-	
G.F. Gader	2	104.5	26.1	1.9	86.1	4.8	7.7	s	a	m	e	-	-	-	-	1	11.5	6	-	12.1	-	
<u>KRASNOVKA</u>																						
D.P. Penner	1	29	4.8	3.4	79.3	-	17.2	s	a	m	e	-	1	-	-	-	4.2	2	2.3	3.0	-	
30-50 des.																						
G.G. Garder	1	32	8.0	3.1	78.1	-	18.7	s	a	m	e	-	-	-	-	1	5.2	4	2.2	4.1	-	
V.P. Velke	1	32	4.0	3.1	78.1	-	18.7	s	a	m	e	1	1	-	-	1	4.2	1	2.2	3.2	-	
G.K. Valtser	1	32	3.6	3.1	84.4	-	12.5	s	a	m	e	1	1	-	-	-	4.2	1	2.2	3.0	-	
D.I. Ketler	1	32	5.3	3.1	81.2	-	15.6	s	a	m	e	-	1	-	-	-	4.4	1	1.4	4.0	-	
50-100 des.																						
D. Evart	2	54	18.0	1.8	71.8	-	20.4	1.1	86.5	-	12.4	1	1	1	-	1	9.1	2	4.3	11.2	-	
100 des.																						
P.F. Klassen	1	216	54.0	0.5	90.3	2.8	6.5	s	a	m	e	1	1	1	2	2	8.1	-	3.0	25.9	-	
I.I. Val	1	192	48.0	0.5	93.7	-	5.7	s	a	m	e	1	-	-	1	1	8.1	-	3.3	20.0	-	
Yu I. Reimer	1	160	32.0	0.6	91.2	-	8.1	s	a	m	e	2	-	-	1	1	8.0	-	3.2	19.1	-	
G.G. Yansen	2	225	75.0	0.4	92.9	-	6.7	s	a	m	e	1	2	-	1	1	14.1	-	2.2	24.6	-	
I.D. Frants	3	309	61.8	0.3	88.3	-	11.3	s	a	m	e	-	2	-	2	1	20.1	5	5.1	38.8	-	

APPENDIX IX

ENCLOSED FARMS ON RENTED APPANAGE LAND IN NIKOLAYEVSKIY UYEZD

RETURNS FOR INDIVIDUAL HOUSEHOLDS (11)

NAME OF PEASANT FARMER	No. land parcels per farm	Size of farm in desyatinas	SHIP	OWNER- % of all land in use under			Rotation	Per farm number of:					Per farm number of:								
				Av. amount of land per head	Usadba	Arable		Hay	Pasture and wood	Single share plough	Double share plough	Multiple share plough	Seed-drill (simple)	Seed-drill (regulated)	Harvesting machines	Threshing machines	Cattle	Sheep	Pigs	Horses	Camels
30 des.																					
N.Kh. Polevoy	5	25.0	4.4	4.0	89.0	-	5.0	2.0	-	-	-	-	1	-	1.1	4.1	-	5.1	-	-	-
M.K. Fomenko	5	26.5	3.8	7.5	86.8	-	5.7	1.0	-	-	-	-	1	-	2.4	-	0.1	4.1	-	-	-
S.M. Tulak	6	27.0	2.3	7.4	92.6	-	-	1.0	-	-	-	-	2	-	1.2	-	-	4.1	-	-	-
Average		26.2	3.5	6.4	89.5	-	4.1	1.3	-	-	-	-	1.3	-	1.6	1.4	0.03	4.4	-	-	-
30-50 des.																					
I.D. Sizanenkov	5	41.0	3.5	5.0	95.0	-	-	2	-	1	-	-	2	-	3.8	11.1	1.2	4.0	4.0	-	-
M.V. Avramenko	5	41.0	4.9	4.9	95.1	-	-	1	-	-	-	-	2	-	2.2	10.0	4.0	4.2	-	6.0	-
M.M. Karpenko	5	44.0	7.0	4.6	63.6	31.8	-	1	-	-	-	-	1	-	2.2	9.9	1.0	4.2	-	-	-
M.E. Fenzenko	3	44.5	8.9	5.6	94.4	-	4.5	1	-	-	-	-	-	-	1.1	8.6	2.4	4.0	-	-	-
S.E. Krasnov	5	47.0	3.0	4.3	89.4	2.1	-	3	-	-	-	-	1	1	4.2	15.1	3.2	6.0	-	10.0	-
L.S. Sherovatob	3	48.25	1.8	21.2	66.3	-	12.4	4	1	-	-	-	5	-	5.0	20.0	4.0	10.0	12.0	-	-
A.F. Babenko	3	48.0	4.2	4.2	79.2	12.5	4.2	1	-	-	-	-	3	-	2.2	9.6	3.2	3.1	-	6.0	-
M.G. Khiznyak	6	49.75	5.6	2.1	93.8	-	4.2	2	-	-	-	-	1	-	3.6	15.0	-	6.0	-	-	-
I.M. Salo	5	49.75	6.7	4.1	95.9	-	-	1	-	-	-	-	1	-	1.1	-	-	2.1	-	-	-
I.A. Rimarenkov	4	46.6	4.8	15.5	84.5	-	-	1	1	-	-	-	-	-	2.1	5.5	1.0	4.0	-	-	-
Average		45.9	4.4	6.1	86.7	4.6	2.6	1.7	0.2	0.1	-	-	1.6	0.1	0.3	10.5	2.0	4.8	1.6	2.2	-
50-100 des.																					
P.R. Shmel	4	51.0	5.2	3.9	92.2	-	3.9	1	-	-	-	-	1	-	2.1	4.0	-	4.1	-	-	-
F.P. Sloboda	4	50.0	5.1	4.1	83.7	-	12.2	1	-	-	-	-	1	-	3.4	9.4	2.0	6.2	-	-	-
K.R. Gora	5	50.0	5.7	4.0	91.0	-	5.0	-	2	-	-	-	1	-	1.0	3.0	-	4.1	-	-	-
D.G. Dvoryankin	6	50.0	4.8	4.0	96.0	-	-	-	1	-	-	-	1	-	2.1	13.6	1.0	2.2	4.0	-	-
G.D. Gavrilenko	5	50.0	3.7	2.0	88.0	8.0	-	1	-	-	-	-	1	-	2.0	-	-	3.0	-	-	-
F.D. Mud	6	51.9	5.2	2.0	98.0	-	-	1	-	1	-	-	1	-	5.4	7.2	2.0	3.0	-	6.0	-
Ya.P. Pottoratski	12	60.0	5.0	0.8	50.0	25.0	24.2	1	-	1	-	1	1	-	4.3	-	1.3	6.0	-	4.0	-
T.I. Pronenko	5	67.5	11.7	4.4	86.7	5.9	3.0	1	-	-	-	-	-	-	3.2	10.5	0.3	3.0	2.0	-	-
P.E. Zakharorko	5	75.0	9.7	4.0	90.7	-	5.3	2	-	-	-	-	1	-	4.5	15.5	2.0	6.1	-	4.0	-
N.N. Yudanor	3	95.0	5.5	2.1	92.6	3.2	2.1	3	2	-	-	-	3	1	5.3	30.1	3.0	12.5	10.1	-	-
Ya. D. Sakur	6	97.0	10.3	4.1	95.9	-	-	2	-	-	-	-	1	-	4.6	3.8	6.8	7.2	-	-	-
Average		63.4	6.5	3.2	88.0	3.7	5.1	1.2	0.5	0.2	-	0.1	1.1	-	3.4	8.8	1.7	5.2	1.5	1.3	-
100 des.																					
E.A. Volokh	1	138.75	17.1	3.6	86.3	-	10.1	2	-	-	-	-	1	-	7.1	7.0	0.2	3.1	2.0	-	-
S.S. Morev	11	150.0	13.3	2.7	97.3	-	-	2	-	1	1	-	2	1	5.5	28.2	2.0	9.2	-	5.0	-
I.M. Kazachek	12	160.6	4.4	0.4	49.8	24.9	24.9	2	-	2	1	1	2	1	4.1	6.0	3.8	10.2	-	10.1	-
Average Total		149.8	11.6	2.2	76.9	8.9	12.0	2	-	1	0.7	0.3	1.7	0.7	5.6	13.7	2.0	7.5	0.7	5.0	-

ENCLOSED FARMS FORMED PRIOR TO 1906 AT THE INITIATIVE OF THE
PEASANTS - RETURNS FOR INDIVIDUAL HOUSEHOLDS (11)

X - 1. In Samarskiy Uyezd

Name of Peasant Farmer and Size of Farm in des.	No. land parcels per farm	Size of farm in des.	No. des. of arable per head of population	% of own land under:				% of all land in use (own and rented) under:				Rotation in use on farm
				Usadba	Arable	Hay	Pasture and woodland	Usadba	Arable	Hay	Pasture and woodland	
<u>0.0 - 30.0</u>												
P. I. Kafilov	4	10.0	2.0	-	100.0	-	-	-	100.0	-	-	Three-field
I & V Arkhipov	1	14.5	4.0	-	34.5	34.5	31.0	-	34.5	34.5	31.0	
I. G. Soldatkin	1	29.5	2.0	1.7	91.5	-	6.8	-	91.8	-	6.6	
I. V. Tselikov	1	9.75	3.4	28.1	71.8	-	-	1.6	70.7	24.2	-	
T. F. Krivosheyev	3	7.0	4.0	-	57.1	-	42.9	-	57.1	-	42.9	
K. Ya. Pankov	1	15.0	1.2	100.0	-	-	-	100.0	-	-	-	Transitional to 3-field
Kh. A. Suits	3	19.5	2.4	2.6	74.4	7.7	15.4	2.6	74.4	7.7	15.4	Three-field
N. I. Shcherbakov	3	23.25	1.5	6.4	77.4	7.5	8.6	3.8	61.1	29.9	5.0	
A. P. Retyunskiy	3	20.0	2.3	2.5	80.0	10.0	7.5	2.0	84.0	8.0	6.0	
D. A. Trykhanov	2	13.5	1.0	1.9	83.3	14.8	-	1.9	83.3	14.8	-	
I. P. Sapozhnikov	2	24.0	2.5	0.3	83.0	-	16.7	0.3	83.0	-	16.7	
I. Kaftaykin	2	25.0	3.2	3.0	80.0	8.0	6.0	1.1	81.8	11.4	3.4	
Average Total		17.6	2.5	11.4	75.6	4.7	8.5	8.1	75.4	11.9	4.6	
<u>30.01-50.0</u>												
I. Ye. Samsonov (1)	1	33.5	11.0	1.5	98.5	-	-	0.8	52.8	16.0	30.4	Transitional to 3-field
D. C. Barchenkov	1	34.0	3.5	4.4	94.1	-	1.5	3.8	82.1	12.8	1.3	Three-field
T. A. Tsel	4	40.0	6.6	2.5	83.7	6.25	-	0.2	87.6	4.8	5.7	
A. G. Shitikov	1	47.0	5.2	-	87.9	12.1	-	-	88.4	11.6	-	3-field with extra parcel for leygrass
D. M. Glukhov	1	39.5	5.1	2.5	76.0	5.0	16.5	0.8	57.6	6.4	48.0	Three-field
O. N. Panov	3	39.0	4.5	2.6	82.0	7.7	7.7	1.7	61.0	5.1	35.6	Long fallow sowing only
T. T. Akutin	1	30.0	13.8	-	66.8	16.7	16.7	-	84.6	7.7	7.7	spring grains
Average Total		37.6	7.1	1.6	80.2	13.1	5.2	0.01	69.4	8.2	22.4	
<u>50.01-100.0</u>												
V. S. Danilov	1	99.0	8.9	-	89.9	-	10.1	-	89.9	-	10.1	Three-field
Ye. I. Samsonov (2)	1	96.0	5.1	3.1	75.0	-	21.9	1.0	33.8	28.9	36.2	
I. M. Ledayev	1	50.0	4.5	-	100.0	-	-	-	65.1	-	34.9	
G. G. Filatov	3	69.8	17.1	2.9	83.8	7.9	5.4	1.8	62.8	18.8	16.5	
Average Total		78.7	8.9	1.3	82.8	3.9	11.8	0.8	50.8	16.9	31.5	3-field with extra parcel for grasses
<u>100.01</u>												
Kh. Kh. Kitsman	4	205.0	26.3	1.5	82.9	9.8	5.85	1.2	84.7	8.2	4.9	
G. B. Rizen	3	109.0	14.2	8.3	91.7	-	-	8.3	91.7	-	-	
Average Total		157.0	20.2	3.8	86.0	6.4	3.8	3.4	87.6	5.7	3.4	

FARM IMPLEMENTS

LIVESTOCK

Per farm number of:

Name of Peasant Farmer and Size of Farm in des.	Per farm number of:				Per farm number of:				Remarks				
	Single share plough	Double share plough	Multiple share plough	Seed-drill (simple)	Seed-drill (regulated)	Harvester	Threshing machine	Cattle		Sheep	Pigs	Horses	Oxen
0.0-30.0													
P.I. Kafilov	1	-	-	-	-	-	-	1.0	3.0	-	3.0	-	Livestock maintenance poor
I & V Arkipov	2	2	-	-	-	2	1	4.4	10.1	4	10.2	-	
I.G. Soldatkin	-	1	-	-	-	1	-	4.2	-	-	3.1	-	Livestock maintenance poor
I.V. Tselikov	2	-	-	-	-	-	-	7.8	-	9	9.2	-	
T.F. Krivosheyev	1	-	-	-	-	-	-	1.0	5.0	1	4.0	-	Livestock maintenance poor
K.Ya. Pankov	2	-	-	-	-	1	-	4.6	20.0	5	8.2	-	Livestock maintenance poor
Kh.A. Suits	1	-	-	-	1	1	-	3.1	5.5	2	3.0	-	Livestock maintenance good
N.I. Shcherbakov	1	1	-	-	-	1	-	3.2	12.8	2	5.2	-	
A.P. Retyunskiy	-	1	-	-	-	1	1	3.0	10.9	1	4.3	-	
D.A. Trykhanov	1	-	-	-	-	-	-	1.2	3.0	-	2.1	-	
I.P. Sapozhnikov	1	-	-	-	-	-	-	2.3	5.0	-	4.2	-	
I. Kaftaykin	-	-	-	-	-	1	1	2.0	10.1	-	4.2	-	
Average Total	1	0.4	-	-	0.08	0.7	0.25	3.15	7.1	2.0	5.1	-	
30.01 - 50.0													
I.Ye. Samsonov (1)	2	1	-	-	-	1	-	7.1	5.2	1	5.2	-	Improved breed of livestock
D.C. Barchenkov	1	-	-	-	-	-	-	3.1	4.9	2	5.2	1	Livestock maintenance good;
T.A. Tsel	1	1	-	-	-	-	1	5.3	-	2.2	4.1	-	milk separator; improved breed.
A.G. Shitikov	1	1	-	-	-	-	1	10.7	12.0	0.4	5.0	-	Sells milk to cheese factory.
D.M. Glukhov	1	1	-	-	-	-	1	3.3	20.1	1	5.2	-	Livestock maintenance good.
O.N. Panov	1	1	-	-	-	-	1	2.2	15.1	-	7.1	-	
T.T. Akutin	2	-	-	-	-	-	-	3.1	-	3	3.0	-	Livestock maintenance good.
Average Total	1.3	0.7	-	-	-	0.14	0.6	5.0	8.2	1.4	5.0	0.14	
50.01 - 100.0													
V.S. Danilov	4	-	-	-	-	1	1	10.5	30.0	2	12.2	8	Milk separator
Ye.I. Samsonov (2)	9	2	1	2	-	1	-	21.16	10.0	2	24.9	-	
I.M. Ledayev	6	-	-	-	-	1	-	6.5	25.0	-	16.3	-	
G.G. Filatov	2	1	-	-	-	1	1	4.0	10.0	-	8.0	-	
Average Total	5.25	0.7	0.25	0.5	-	1	0.5	10.5	18.75	1	15.35	2.0	
100.01													
Kh.Kh. Kitsman	6	6	-	2	3	4	2	15.12	5.6	5.8	22.7	-	Improved breed of pigs.
G.B. Rizen	3	3	-	-	-	4	1	14.2	-	1.3	17.3	-	Livestock maintenance good.
Average Total	4.5	4.5	-	1	1.5	4	1.5	14.7	2.8	3.5	20.0	-	Livestock maintenance good.
													Sells milk to cheese factory.

X - 2. On Allotment Land in Malouzenskiy Uyezd

Name of Peasant Farmer and Size of Farm in des.	No. land parcels per farm	Size of farms in des.	No. des. arable per head of population	Pasture and woodland								Rotation in use on farm	
				Usadba	Arable	Hay	Usadba	Arable	Hay	Pasture and woodland			
0.0 - 30.0													
P.V. Kochanov	2	25.0	2.2	2.0	80.0	-	18.0	1.6	86.5	-	12.2	Long fallow	
30.01 - 50.0													
A.F. Kolesnichenko	2	40.0	3.9	-	67.5	32.5	-	78.3	21.7				
50.01 - 100.0													
P.A. Karyabkin	1	65.0	10.3	1.15	98.15	-	-	1.0	99.0	-	-		
F.D. Pimenov	2	87.75	4.6	0.85	62.7	-	36.5	0.7	69.6	-	29.7		
V.K. Myasnikov	3	65.0	4.4	1.15	61.5	-	37.3	0.9	68.7	-	30.3		
G.I. Titov	2	55.0	10.0	1.4	72.7	25.9	-	1.2	63.5	35.3	-		
M.I. Kachurin	2	70.0	4.5	1.1	71.4	27.5	-	0.5	99.5	-	-		
S.S. Sorokin	2	64.0	5.0	6.25	70.3	23.4	-	2.8	66.0	31.3	-		
P.G. Selivanov	2	90.5	10.0	0.6	66.3	33.1	-	0.2	49.4	49.4	-		
P.S. Popov	2	95.0	8.7	0.8	73.7	25.5	-	s	a	m	e		
Average Total		74.0	9.2	1.5	71.6	17.4	9.5	1.0	64.8	28.3	5.8		
100.01													
O.I. Maslennikov	1	100.0	8.6	0.75	60.0	20.0	19.25	0.45	66.7	21.2	11.7		
I.A. Lukashov	1	100.0	8.7	0.75	70.0	29.25	-	0.5	67.9	31.8	-		
P.G. Gorbato	1	137.75	6.4	0.5	50.8	48.6	-	s	a	m	e		
Khutor Kukhovaryends	1	182.0	17.5	8.8	76.9	8.8	5.5	3.6	51.1	29.9	15.4		

Name of Peasant Farmer and Size of Farm in des.	ROTATION	FARM IMPLEMENTS					LIVESTOCK							REMARKS						
		Per farm number of:					Per farm number of:													
		under long fallow % of arable land	length of time land left under long fallow	Single share plough	Double share plough	Multiple share plough	Seed-drill (simple)	Seed-drill (regulated)	Harvesters	Thrashing machines	Cattle	Sheep	Pigs		Horses	Camels	Oxen	Head of horses per 100 des. arable	Head of camels per 100 des. arable	Head of oxen per 100 des. arable
0.0 - 30.0																				
P.V. Kochanov	33.3	1-2	1	1	1	-	-	1	1	-	3.2	8	-	2.2	4	-	6.9	-	12.5	Experimented with ley grass but failed. Livestock products sold on market.
30.01 - 50.0																				
A.F. Kolesnichenko	33.3	1-2	1	1	1	-	-	-	1	-	2.1	7	-	6.1	-	4	13.0	8.5	5.3	Zemstvo report noted that farming on farm no different from in commune.
50.01 - 100.0																				
P.A. Karyabkin	c.33.3	1-2	1	2	2	-	-	-	1	-	2	-	-	5	-	10	6.5	13.1	-	Irrigates 8 des. Experimented with ley grass but failed.
F.D. Pimenov	33.3	1-2	1	2	2	-	-	-	1	-	4.3	5	-	2	6	-	2.7	-	6.7	
V.K. Myasnikov	50.0	3	1	2	2	-	-	-	1	-	2.1	-	1	4	4	-	7.3	-	7.3	
G.I. Titov	33.3	1-2	1	1	1	-	-	-	1	-	3.3	-	1	2	4	-	5	-	10	
M.I. Kachurin	33.3	1-2	2	4	4	-	-	-	2	-	7.0	20.0	2.0	9.3	-	14	13.3	-	20	
S.S. Sorokin	33.3	1-2	2	4	4	-	-	-	2	-	6.3	-	2	6.2	10	-	6.5	-	10.5	Irrigates 25 des.
P.G. Selivanov	33.3	1-2	2	3	3	-	1	-	1	-	2.1	-	-	5	16	-	4.5	-	14.5	Irrigated 5 des. Experimented with ley grass but failed.
P.S. Popov	33.3	1-2	3	4	4	-	1	-	2	-	6.4	20	-	8	15	12	11.4	17.1	21.4	
Average Total			1.6	2.75	-	0.25	-	1.4	-	4.2	5.6	0.75	5.2	6.9	4.5	7.1	3.8	11.3		
100.01																				
O.I. Maslennikov	50.0	3	3	5	5	-	1	-	2	-	6.4	-	2	6	10	12	5.4	0.9	9.1	
I.A. Lukashov	33.3	1-2	2	3	3	-	-	-	2	-	4.4	-	-	8	12	-	8.4	-	12.6	
I.G. Lebedev	50.0	1-2	1	2	2	-	-	-	1	-	3.2	10	2	3	3	-	4.6	-	4.6	
P.G. Gorbатов	50.0	3	2	3	3	-	-	-	1	-	3.0	-	1	3	6	12	4.3	17.1	8.6	
Khutor Kukhovaryends	33.3	1-2	5	8	8	-	3	-	1	1	10.5	50	10	20.5	12	-	8.8	-	5.3	Paid redemption debt and therefore land held in hereditary tenure.
Average Total			2.6	4.2	-	0.8	-	1.4	0.2	5.5	12	3	8.1	8.6	4.8	6.3	3.6	8.0		

X - 3. On Rented Land in Pokrovskiy Uyezd

NAME OF PEASANT FARMER AND SIZE OF FARM IN DES.	No. land parcels per farm	Size of farm in des.	Usadba			Arable	Hayland	Pasture and woodland			Single share plough	Double share plough	Multiple share plough	Seed-dri11 (simple)	Seed-dri11 (regulated)	Harvesters	Thrashing machines	Cattle	Sheep	Pigs	Horses	Camels	Oxen	Head horses per 100 des. arable	Head camels per 100 des. arable	Head oxen per 100 des. arable	
30.01 - 50.0																											
M.I. Chaban	1	40	6.5	2.5	97.5	-	-	-	-	1	2	-	-	-	-	1	-	-	3.1	-	1	10.3	-	-	25.6	-	-
P.P. Kukhovarenko	1	40	6.7	3.7	96.3	-	-	-	-	1	1	-	-	-	-	-	-	-	3.2	-	1	4.0	6	-	10.3	15.4	-
Average total	40	40	6.6	3.1	96.9	-	-	-	-	1	1.5	-	-	-	-	0.5	-	-	3.15	-	1	7.1	3	-	17.5	7.2	-
50.01 - 100.0																											
V.F. Leber	1	93	1.8	2.1	96.8	1.1	-	-	3	3	-	-	1	-	-	2	-	-	8.3	15	3	10.3	6	-	11.1	6.7	-
P.P. Buzin	1	52	2.7	1.9	98.1	-	-	-	2	3	-	-	-	-	-	1	-	-	2.5	20	6	10.5	6	-	19.6	11.3	-
Ya.B. Shutel	1	65	3.2	1.5	98.5	-	-	-	2	4	-	-	-	-	-	2	-	-	8.1	40	7	17.1	6	-	26.6	9.4	-
Average Total	70	70	8.0	1.9	97.6	0.5	-	-	2.3	3.3	-	-	0.3	-	-	1.7	-	-	8.0	25	6.3	12.6	6	-	19.1	9.3	-
100.01																											
I.I. Chabar	1	600	21.5	1.3	82.0	16.7	-	-	11	3	9	3	-	3	-	6	-	-	11.9	15	10	35.1	25.1	80	7.1	5.1	16.2
A.A. Martinenko	1	145	14.2	2.1	97.9	-	-	-	3	3	2	2	-	2	-	4	1	1	7.7	15	10	10.2	12.0	12	7.0	8.4	8.4
I.A. Tsimbal	1	371	27.0	0.3	72.8	-	26.9	-	8	6	1	2	-	2	-	7	1	1	10.7	50	6	30.1	19.0	24	11.1	7.0	8.5
F.M. Timofeyev	1	350	29.0	0.5	99.5	-	-	-	9	6	-	-	-	-	-	5	1	1	10.1	20	5	30.8	27.0	46	8.6	7.8	13.2
B.A. Libikh	2	795	117.0	0.4	73.6	25.2	0.8	-	8	5	-	-	-	-	-	-	1	1	20.2	50	12	25.1	15.0	70	4.3	2.6	11.3
E. Kh. Kober	1	162	53.0	1.2	98.8	-	-	-	3	3	-	2	-	2	-	2	-	-	5.5	8	5.6	17.2	-	-	10.6	-	-
A.A Shat	1	1052	42.0	0.3	96.7	1.3	1.4	-	4	9	3	3	-	-	-	6	1	1	15.1	-	15	30.2	13.0	40	2.9	1.3	3.9
Kh.Kh. Gerber	1	200	6.4	1.5	98.5	-	-	-	3	4	-	-	-	-	-	1	-	-	8.7	10	7	11.2	8.0	-	5.6	4.1	-
E.F. Geringer	1	165	6.3	0.6	99.4	-	-	-	2	4	1	1	-	1	-	1	-	-	9.9	40	9	14.0	13.1	-	8.5	7.3	-
A.A. Bush	1	140	9.9	0.6	99.4	-	-	-	5	6	1	1	-	1	-	2	-	-	10.1	20	6	25.5	13.0	-	14.2	7.4	-
P.A. Tsimbal	1	391	18.4	0.5	61.1	-	38.4	-	7	7	1	3	-	3	-	3	-	-	6.4	15	5	20.1	20.0	20	8.4	8.4	8.4
A.A. Svistinov	1	488	60.6	0.6	99.4	-	-	-	5	3	5	1	-	1	-	5	-	-	6.4	25	10	20.5	-	40	4.1	-	8.2
F. & F. Kramer	1	210	13.0	0.7	99.3	-	-	-	5	9	1	-	-	-	-	3	1	1	18.1	42	9	39.1	22.0	-	18.7	0.6	-
G.G. Berger	1	142	23.5	0.1	99.3	0.6	-	-	3	3	-	-	-	-	-	2	1	1	7.5	14.1	7.1	11.1	-	10.6	7.8	-	1.1
Ya. G. Gerber	1	147	22.7	0.2	92.5	0.6	6.8	-	3	3	-	-	-	-	-	1	1	1	5.3	15.1	7.9	4.2	71.0	-	10.3	5.1	-
Kh. Kh. Shults	1	399	43.8	0.1	98.7	-	1.1	-	3	2	1	-	-	-	-	1	1	1	8.6	-	8.1	15.6	22.0	-	3.8	5.6	-
Kh. F. Shults	ND.	215	17.4	0.1	98.1	2.8	-	-	2	4	1	-	-	-	-	1	1	1	8.6	20	8.9	24.1	-	26.0	11.5	-	12.5
Ya. G. Spindler	1	236	18.4	1.2	98.5	0.3	-	-	4	7	1	-	-	-	-	2	1	1	6.9	25	7	22.9	6.0	31.3	6.6	1.8	9.4
N. Kh. Kremer	1	283	39.7	0.7	98.2	1.1	-	-	2	2	1	-	-	-	-	2	1	1	7.7	12.1	10.1	2.1	20.3	-	3.6	0.7	7.2
A. Total	241	6307	0.5	90.3	5.0	4.2	4.7	1.5	0.7	-	-	-	-	-	-	2.8	0.6	9.8	20.9	8.3	21.0	12.8	21.0	8.1	4.4	6.1	-

NAME OF PEASANT FARMER AND SIZE OF FARM IN DES.	FARM IMPLEMENTS					LIVESTOCK										REMARKS
	Per farm number of:					Per farm number of:										
	Single share plough	Double share plough	Multiple share plough	Seed-drill (simple)	Seed-drill (regulated)	Harvesters	Threshing machines	Cattle	Sheep	Pigs	Horses	Camels	Oxen	Head of horses per 100 des. arable	Head of camels per 100 des. arable	
Krasno-Kumskiy Volost																
100.01																
D.V. Rudolf	5	8	2	3	-	4	-	12.1	23	5	28.1	15	32	25.2	13.5	28
Novo-Troitskiy Volost																
100.01																
Ya.O. Kozmyakov	1	2	-	-	-	2	-	2.3	-	2.0	2.0	-	12	1.9	-	11.5
Verknye-Karamanskiy Volost																
50.01 - 100.0																
F.D. Rait	4	9	-	-	-	2	1	7.8	39	15	21.4	20.1	-	4.8	4.6	-
D.F. Rait	2	6	-	-	-	1	1	8.2	-	10.0	22	12	-	10.4	5.7	-
S.A. Vazem	1	4	-	-	-	2	-	4.0	15	2	14.3	6.2	-	14.6	6.5	-
Ya.A. Vazem	1	4	-	-	-	2	-	4.2	20	2	14.2	6.0	-	16.5	7.1	-
B.A. Vazem	4	6	-	-	-	1	1	9.3	20	5.1	22.1	14	-	8.4	5.4	-
100.01																
Ya.A. Ungefugt	1	4	-	-	-	-	1	5.5	20	2	25.5	-	10	20.2	-	8.1
Khutor Ney-Tsyurykh																
0.0 - 30.0																
K.L. Fink	-	3	-	-	-	1	-	5.5	23	6	14.2	-	-	19.6	-	-
Ya.A. Shpenger	1	2	-	-	-	1	-	2.2	12	2	7.3	-	-	16.6	-	-
K.Kh. Kunts	-	3	-	-	-	1	-	10.5	20	3	13.3	-	-	16.2	-	-
50.01 - 100.0																
F.B. Kunts	-	2	-	-	-	1	-	4.5	20	2	12	-	-	11.8	-	-
K.A. Kherkher	1	1	-	-	-	-	-	1.2	10	2	5	-	-	6.8	-	-
100.01																
S.Kh. Kunts	4	5	-	-	-	1	-	11.2	26	5	23.8	5	-	12.8	2.8	-

Noted in zemstvo report for having a particularly poor rotation.

" " " " "

" " " " "

Sows very little of own land - uses mainly his rented.

Zemstvo report noted that farming on these farms no different from farming in commune

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