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Tambov regional development in the context of integral history, 1800-1917. Contradictions in the modernization of Russian society on a basis of micro-history**Vladimir Dyatchkov and Valery Kanitshev****Introduction**

Research into patterns in the Tambov region in the context of integral history was based on the assumption that Russian towns and villages in 1800-1917 were quite different worlds, with two different economic, demographic, social and cultural systems. Therefore, Table 1 uses both perspectives to display the interaction of the various factors in the rural and urban spheres, but it should be noted that in the period under consideration there were often no sharp borders between them.

There were thousands of landlords and priests living in the countryside at that time. On the one hand they acted as the representatives of the state, as people from the wider urban society, but on the other hand they lived in close contact with the peasants and had often become rustic in their way of life. Their influence on rural life was taken into account without considering any ties the gentry and the clergy may have had to their places of birth.

Equally, thousands of peasants lived in the towns in the Tambov region before the Emancipation and tens of thousands did so afterwards. Some of them assumed an urban way of life, keeping only formal ties with the peasantry, but many more of the urban newcomers continued as representatives of the agrarian society and retained their traditional social behaviour.

The Tambov table on the interrelation of the different domains is somewhat different to the Dutch one. It was thought necessary to include ecological and to a lesser extent military factors. The ecological factor can be regarded as the backlash of nature on man when he tries to change her for his own benefit. The ecological factor became important from the middle of the nineteenth century and was critical in agrarian society by 1900, but it did encourage the organization of modern urban services and amenities.

The military factor is not only connected with the direct impact of war activities but in a broader sense also with the mobilization of those resources

an army needs whether it is involved in war or whether it is a time of peace. This became increasingly noticeable throughout the period in all aspects of life in the Tambov region. Many thousands of soldiers were recruited from there and large quantities of foodstuffs, horses, alcohol, clothes and other goods were purchased. Russia was engaged in great and devastating wars from the beginning of the twentieth century, so the war factor tended to be crucial. It had an important impact on all spheres of everyday life finally leading to crisis and the collapse of the prevailing system in the course of the first World War.

Contradictions in modernization

The dynamics of changing processes, or their absence, are stressed in the tables. Where necessary, the specific periods of crucial changes in the factors and their interaction are given.

A study of modernization in late imperial Russia has become one of the crucial points of post-Soviet historiography. When evaluating reforms and revolutions most researchers have viewed that process as a part of the history of politics on a macro, all-Russian scale. Not much room is left, therefore, for the study of the modernization of Russian society in the light of social history, and when this was done it was also on a macro scale. Very often, Russian social history has been interpreted on the basis of some concepts which were taken as granted and illustrated with selected facts which sometimes ignored the analysis of primary, fundamental data. The macro approach to understanding broad and general historical laws and trends and contradictions on a national, continental or even global scale cannot be rejected entirely, but the danger of researchers becoming subjective with the inevitable result of very different explanations of the essence of Russian modernization must be pointed out. On the one hand is Boris Mironov who viewed Russian modernization in the light of selected, 'necessary' facts as mostly successful,¹ while on the other Vladimir Buldakov stated that modernization led to a crisis of the traditional empire followed by a reactionary 'land commune's revolution' camouflaged as a 'Red Disturbance', which finally restored not an imperial but the Soviet, 'red' system. Buldakov, who used an abundance of basic facts on everyday life from the various social strata, stated frankly that he selected these facts from the 'right' sources only.²

The aim of this research is to clarify the peculiarities of Russian modernization by the method of micro-history, commencing from a study of the primary data concerning individuals, families, small social groups, separate settlements, and progressing to a meso (regional) and macro scale (national

¹ B. Mironov, *The social history of Imperial Russia, 1700-1917* (Boulder 2000).

² V. Buldakov, *Булдаков В.И. Красная смута* (Moscow 1997).

and wider). Microanalysis is not in opposition to macroanalysis. The intention is simply to apply a bottom-up approach to history in order to contribute to insight from the top down. A study of the primary data has shown that the contradictions of Russian modernization are a result of the very origin of the historical sources. For instance, in the second half of the nineteenth century, the Russian state and the Orthodox church thought that the mass registration of births, deaths and marriages (parish registers) had been achieved. But a thorough study reveals that what was obtained was a high level of completeness in recording the official rites such as christenings, weddings and funerals. However, people who were not christened, common law spouses and those who died and were buried without a funeral service were not recorded in the parish registers at all. A comparative study of the medical statistics proved that stillborn babies and those who died before being christened were therefore buried without a funeral service and almost never registered in the parish registers. From the traditional viewpoint of a peasant, or even a town-dweller, there was no need to apply to a church to spend money on a person in such cases. From a civilized priest's standpoint, such facts simply did not exist. This resulted in an under-registration of those unhappy deliveries (including miscarriages in the second half of a pregnancy) by a factor as high as one third of the number of christened newborn babies. Ignorance of these facts which have been obtained from the primary sources has led some macro-historians to paradoxical conclusions, as, for example, Mironov, who regarded serfs as the 'pioneers' of birth control. Primary facts simply show that there were a large number of miscarriages because female serfs laboured the hardest, even in comparison with other peasant groups.

For these reasons an account of the contradictions in the modernization of Russia as reflected in the primary sources is the starting point of this micro-historical study. One of the final results of the study could be to draw up an integral model of the interaction of all the basic historical factors working at a micro scale. The system approach helps to clarify many of the contradictions of Russian modernization found in the everyday social life as seen through individuals, families, small communities and separate settlements. It is hoped that the various databases and experience in using them will allow this task to be carried out successfully.

Table 1 Integral pattern of the Tambov regional development, 1800-1917 (a factor noted in the 1st column is a determinant)

	Demography	Ecology	Economy	Society	Politics	Culture
Demography	Traditional demographic behaviour of peasantry with a display of natural cycles. Rise in birth and death ratios. Cyclic increases of fertile female share. Slight fall of death rate in 1900-14. The first slight signs of social control (rise) of female marriage age in the 1900s. Townspeople turn to a modern demographic pattern. Modernization of family structure in all social strata. Rise of inner and outmigration.	Lack of convenient and fertile lands parallel to population growth since the 1850s. Overflowing of the eco-volume of environment.	Agrarian over-population, preservation of the extensive economics. Narrowing of labour market to absorb extra hands, cheap hired labour.	Sharpening of the land problem. Urge to have more children to get extra allotments, parallel to agrarian overpopulation esp. after the Emancipation. Fall in female marriage age to the lowest bio limit before the 1890s. Estate limitations of marriages up to 1861. Regulation of peasant marriages by landlords. Overpopulation in dwellings, poor sanitation which encouraged epidemics and high mortality. Demographic transition in towns for officials and businessmen.	Government relies on vast human resources. Absence of state control of demographic development. State and landlords limit large family partitions. Growth of state support for agrarian migration since the 1850s. Paradoxical influence of the <i>Zemstvo</i> /medical help in the realm of unchangeable demographic behaviour.	Preservation of traditional culture. Absence of rational birth control. Pre-dominance of bio-being demographic behaviour. Rational birth control for some townspeople.

	Demography	Ecology	Economy	Society	Politics	Culture
Ecology	Growth of demographic pressures on environment, lack of arable land.	Ecological crisis increases in agrarian society.	Soil and other natural resources become exhausted due to rapacious exploitation, decrease of land fertility, lack of pasture.	Resource exhaustion, pauperization of peasants. Eco-adaptation of the townspeople.	Absence of state ecology politics. State support for migration, farmsteads, the dawn of nature protection. The <i>Zemstvo</i> and town <i>Dumas'</i> efforts to intensify agriculture and to turn to rational exploitation of natural resources.	Absence of civilized ecological mentality, traditional peasant eco-mentality. Realisation of eco-problems by part of society.

	Demography	Ecology	Economy	Society	Politics	Culture
Economy	Weak industrialization, narrow labour market. Agrarian overpopulation. Increasing rhythmic waves of migration. Rejuvenation of labour force.	Exhaustion and increasing lack of natural resources for agriculture. Three-field system to preserve fertility. Rational exploitation of nature and intensification in part of land-lords' economies from the 1860s. Start of utilization of organic and town industrial waste. Absence of mineral raw materials for industry.	Predominance of peasant natural economy. Increase in landlord economies marketability after 1861 and of well-to-do peasant economies in the 1910s. Slow capitalization and industrialization of rural and urban worlds.	Breaking role of the commune and landlords' landowning. Peasant pauperization and ruin of the majority of landlords after 1861. Rationalization of the smaller part of estates. Slow rise of free enterprise.	State support of estates. Limited support of state peasants. Agrarian and trade-industrial reforms, railway construction. Growing but belated, the <i>Zemstvo</i> support of peasant economies since 1860s.	Reliance on empirical knowledge. Birth of special education.

	Demography	Ecology	Economy	Society	Politics	Culture
Society	Peasant land commune as a stimulus for more births and early marriages. Tying allotment size to the number of males. Growing emigration of youth and those of working age, males first, females follow (up to the 1880s and since 1900s), females first in the 1880s to the 1900s. Start of age polarization. Break in social differentiation. Towns-people tend towards a nuclear family.	Low peasant and landlord interest in rational exploitation of nature. Growing signs of anthropometric degeneration (height, weight, health) parallel with overpopulation.	Break in role of communal and landlord land owning. Intensification of part of peasant and landlord economies. Lack of productivity for peasant social differentiation.	Gradual destruction of traditional society. Slow pace of social stratification.	Stable pro-gentry politics. Political weakness of business strata. Reforms at the expense of peasantry. Army resource. Various and hard peasant obligations. Contradictory steps in the process of peasant differentiation.	Many estates are hotbeds of European urban culture. Slow gradual progress and penetration of urban culture (lite-racy, clothes, dwelling, medical care, communications) in the villages speeded up in the 1900s.

	Demography	Ecology	Economy	Society	Politics	Culture
Politics	Vague awareness of necessity of reforms, absence of demographic politics. Limitations of extended family partitions. Incentives towards migration politics.	Incentives towards out-migration, many-field system. Embryos of forest protection since 1830s. Eco-politics of the town <i>Dumas</i> .	Necessity of permanent agrarian reforms, of state and social support of landlords and limited support for state peasant economies. The <i>Zemstvo's</i> support for peasant households since the 1880s.	Predominance of traditional social strata. Peasant anti-state and anti-landlord outbursts up to 1900. Agrarian revolution since 1902. 'Land commune revolution' since the 1910s.	Constant social and political tension. Outbursts in crisis years. Rapid formation of a rural cradle for political activists parallel to growing overpopulation and agrarian 'question'. Strong traditionalism. Growth of political opposition since the 1900s. Weak liberalism and socialism. Authorities' and self-government efforts to support the Army, high degree of militarization of society.	Social-estate limitations. Spread of modern culture among peasants (mainly by the <i>Zemstvos</i> and town <i>Dumas</i> since the 1860s).

	Demography	Ecology	Economy	Society	Politics	Culture
Culture	Retaining of traditional culture. Absence of rational birth control. Low value of human life. Striving of peasants for hated but attractive urban patterns.	Poor knowledge of modern technologies. A dawn of eco-conscience.	Low progress of agricultural knowledge. More demand for educated people.	Lack of need, means for and ways to modernize culture. Land commune as a guarantee of traditional culture. Gentry as modern culture mono-polist.	Limitations of cultural access for peasants. Lack of peasant education for conscious political activity. 'Bookish' opposition of the gentry. Traditional worship for the army, military-patriotic propaganda. More literate soldiers since the 1900s. Rise of antiwar (antimilitary) sentiments since 1904. <i>Zemstvo</i> efforts to introduce modern culture since 1860s.	Sociocultural break of traditional estates (strata).

Comments will now be made on the various parts of the table, taking each domain in turn.

Demography - demography

During the greater part of the nineteenth century, the reproductive behaviour of peasants who lived in patriarchal families seems to have been fully traditional and to have followed the Malthusian pattern. In the 1860s-1880s there was some improvement in health and some decrease in the death rate. Since the death rate for girls decreased relatively more than that for boys, while at the same time there was also a relatively higher birth rate for girls, a serious surplus of fertile females was created. In the 1880s-1890s, 14-17% of rural young women found themselves hopelessly superfluous with no male partners available. That process can be traced easily at any level. The data for those born and who survived in the separate villages shows that every sixth or seventh young women in that period was extra. By 1897, 69,344 (13.65%) of the rural fertile females between the ages of 16-39 in the Tambov Region were extra, having no male counterpart. The figure was 26.05% for village women born in 1870-74 and 13.96% for those born in 1875-80 and 20.44% and 12.08% respectively in the rural and urban female population as a whole.

Females also dominated in the increase in population in the late 1860s-1870s on an all-Russian scale. Peasant families reacted to the risk of their daughters remaining single by lowering the female age at marriage close to the bio-limit. In the 1880s-1890s about 45% of village young women married at the age of 16-17 and about 48% at the age of 18-19 while the average age of menarche was 16.4. This period of a dearth of young men also took away from young widows their chances of marrying for a second time, which up till then had been almost guaranteed. A substantial proportion of young men were younger than their brides, forming a group of noticeably very young grooms despite modernization.

Better health conditions combined with a lowering of the marriage age among peasants resulted in an increase in female fertility, especially in remote villages with almost no migration (from I_g of about 0.270-0.340 by 1861 to 0.340-0.420 by 1911) and a rapid increase in the population. Rhythmic and increasing waves of superfluous villagers, particularly females, with traditional and unchanging reproductive behaviour swept over the small towns with clear social, psychological and political consequences as a result. A transition to a rational reproductive behaviour with a planned family, high age at marriage and birth control was related to the peasants' break with agriculture, traditional work and way of life. This is why signs of modern demographic behaviour appeared in the pure town strata as well as in trade-industrial villages from the 1840s onwards.

Table 2 Types of marriages in the village of B. Lipovitsa³ (data for Malye Pupki in brackets) %

7-year phase and average N of marriages/year	Marriage widower-widow	'Pure' first marriages	Marriage widow-1 st marriage groom	Marriage widower-1 st marriage bride	Groom younger than bride	Groom under the age of 18 (16-17)	
1836-42	31.0	4.5	85.7	3.6	6.3	13.4 (50.7)	0 (0)
1843-49	36.7	5.4	75.8	1.8	17.0	13.7 (55.0)	0 (0)
1850-56	37.1	7.6	82.2	1.5	8.7	11.9 (50.1)	0 (0)
1857-63	46.1	9.7	77.0	2.4	10.9	8.9 (50.5)	0 (3.2)
1864-70	46.0	8.2	83.2	2.5	7.1	7.3 (37.5)	3.6 (14.1)
1871-77	23.3	5.6	79.0	2.1	13.3	14.3 (40.6)	5.0 (15.7)
1878-84	35.1	7.3	83.8	0.4	8.5	10.2 (46.7*)	1.3 (9.5)
1885-91	44.0	6.3	81.2	1.3	11.2	14.5 (42.7*)	1.8 (12.8)
1892-98	42.6	4.7	89.8	0.9	4.7	15.5 (47.1)	2.7 (4.6**)
1899-1905	44.3	5.1	88.4	0.3	6.1	15.5 (36.0)	4.5 (14.7)
1906-12	53.0	3.8	89.2	0	7.0	12.7 (30.1)	5.1 (12.8)

* Data on M. Pupki for 2 of this 7 years

** Data on M. Pupki for 3 of this 7 years

Family modernization with a change from an extended family to a nuclear one affected all the social strata in the region. This trend to establish a nuclear family of two adults with children was obvious for the gentry (nobles), the officials and the *meschane* (town class) in the first half of the nineteenth century. The average size of a peasant family household was 8.5 people up to the 1850s with some decrease taking place after the Emancipation. There was a definite turning point in the 1860s-1890s when it became easier to partition families, with a resulting decrease to an average of 6.4 people per household by 1897. It is probable that this reduction was due to some increase of crop yields with only relatively minor increased family labour input during the period when the steppe black soil came into cultivation. But natural land resources in the region were used up by the 1880s, while intensive agriculture was taken up only very slowly so that a further significant reduction in the size of peasant households was impossible. By 1917 their average size was 6.1.

The conjugate family still dominated but with a relatively large number of children, more than 4 on average. There is also, though, clear evidence that the modernization process in the region did not result in a continuous reduction in family size. The data shows that there was regular expansion and contraction.⁴ In the decades just after a new settlement had been formed there

³ B. Lipovitsa is situated 25 km south of Tambov.

⁴ Annual lines of number of births and deaths, marriages, number of households and total population at benchmark years such as 1636, 1676, census years in the 1710s-1850s, 1862, 1886, 1897, 1911, 1916 for dozens of separate rural settlements through the period beginning from the initial settlement in the seventeenth century.

were 4–6 people per household on any estate, but a few decades later an average family numbered 8–11 people and the villages became overpopulated again with total use of all the arable land in the area. When this happened the village, either spontaneously or at the instigation of the landlords, evicted the extra hands and mouths, usually to new land in the south-east of the region. In this way the family/household size in the old settlement was reduced to an average 5–6 people and a new village began its life with 3–4 people per household. However, the possibilities of internal rural migration were exhausted by the 1860s so that the extra peasants generally began to move in the opposite direction with the towns and cities as their destinations.

The average size of a town family was 4.5–5.5 people, depending on the extent of urbanization. The proportion of extended families in the classes of the gentry, the officials and the *meschane* was still decreasing. That process also started in the families of some of the merchants and the migrated peasants, although the tradition of a big family was still very strong among the clergy, merchants and peasants.

The increased reproduction rates in the first half of the nineteenth century caused the region to witness the first signs of agrarian overpopulation and this was aggravated by the demographic explosion which took place after the emancipation. Over 40% of the rural population found themselves superfluous by the end of the nineteenth century. Out-migrations did not have a very significant effect on reducing the demographic pressure on the village economies. More than 60,000 peasants migrated from the Tambov region in 1816–54. In the next four decades 260,000 villagers left the region, leaving a total population (in 1897) of 2,684,030. Most emigrants moved to the eastern outskirts of the empire where spare land was available. About 100,000 peasants left the region between 1906 and 1914. This number was comparable to the increase in population in just one particular year, for example 1910. The total population was about 3.8 million people by 1914.

Studies of outmigration to the Altay Region on a micro level suggest that there was a long predomination of spontaneous peasant agrarian migration to upgrade their lives but in accordance with their traditional mentality.

Demography - ecology

Higher demographic pressure on the environment first became apparent in the towns, which had remained agrarian settlements until the 1800s. By the 1850s, Tambov had little land available for agriculture but it retained significant plots for vegetable gardens, horticulture and cattle breeding. Huge amounts of organic waste were simply thrown into the river Tsna, causing water pollution and providing perfect conditions for cholera epidemics with the consequent high death rates.

During the first half of the nineteenth century, population growth in rural areas resulted in a relative reduction in arable land (from 2.5 to 1.5 hectares per person), meadowland (from 2 to 1 hectares per person) and forests (from 2 to 1 hectares per person). Human pressure on nature doubled and that process speeded up until 1917. Rural population numbers rose sharply throughout the period increasing the demographic pressure on the traditional environment.

Demography - economy

Because of the overpopulation in agrarian regions, the system of primitive mass labour in agriculture was maintained and the introduction of innovations was held back. A surplus of workers in post-reform villages made hired labour very cheap, both in rural areas and the non-agrarian sectors, with the result that the wages of industrial workers in the region were a factor of three lower than the average in Russia in the 1900s. Industrial out-migration was very low; only 15,000 peasants migrated to industrial regions in the period 1850-1900.

Demography - society

The increase in the population put the agrarian society under strain. The data from Malye Pupki shows that the large households had higher incomes and their cohort members also survived longer. The best family combinations were with three or more boys who would function as workers and allotment receivers when adult. A study of the medical reports shows that in families where the mother had better health, but there was still no birth control or rational family planning, large families gained social and economic advantages. The social position of households was quite unstable and depended mainly on changes in the family dimensions (number of male workers especially, with the bigger the family the higher the social status).

The social factor was insignificant for marriages, though the well-to-do families could allow early marriages for their children or have their older women marry advantageously. The most advantageous age for a man to marry was at 17-18 years old, irrespective of his social position.

In the towns, the demographic impact on society became apparent from the first half of the nineteenth century with a rise in the marriage age and birth control among the officials and to some extent among the businessmen, whose activities depended little on family size. A large family was a burden when income was low, as it was for most of the officials, but the depression in the grain market trade in Morshansk in the middle of the nineteenth century caused a reversal of the trend and an increase in the number of big mer-

chant families for the sake of economic survival. In most of the social strata in the towns extensive reproduction was continued up to 1917.

Demography - politics

The Russian state had traditionally considered a large population as beneficial, but even at the end of the nineteenth century the state had vague ideas about the relationship between the position of the peasants and overpopulation. It realized the necessity for reforms but completely failed to introduce any changes in time in overpopulated regions like Tambov, where the demographic transition turned into a catastrophe. For a number of reasons conditions in the Russian agrarian regions became fundamentally unsettled.

The data on individual migrants shows that the mass of peasant migrants did not experience a gradual transition to social modernization and urban behaviour but instead a break with their former rhythm of life accompanied by poor adaptation. This was manifested by an increased crime rate, in the very essence of Russian revolutionism with a predominance of psychosexual complexes in political activists' behaviour and in the increasing numbers of invalids from birth, the insane and drunkards, etc.

Demography - culture

Traditional demographic behaviour fitted in a traditional peasant culture. Peasants had no need for modern urban culture. Church registration was viewed by peasants as formal. Stillborn, apparently dead or weak newborn babies were not registered in the parish registers although they appear in the medical statistics. Such deaths – actual or soon to be expected – were taken for granted as an inevitable evil. Payment for the rites was regarded as a waste of money.

Social-demographic and economic necessities forced peasants to avoid the church bans on marriages under the age of 16. A study of cases of violation of the rules of church registration by Orlova and Ivanilova⁵ clearly showed that priests often made brides older and minors were married without notes being taken by foreign priests whose names were kept secret from the church authorities. There were cases of marriages using false documents particularly in foreign parishes. Another way to get around the age rules were marriages of Orthodox peasants by old believers' rules, because the latter allowed a girl to marry from the age of 12. It is quite clear that these officially registered

⁵ Е.П. Иванилова and В.Д. Орлова *Влияние норм брачного права на демографическое поведение крестьян Тамбовской губернии в XIX в.: источники и возможные методы их обработки*//*Социально-демографическая история России XIX-XX вв. Современные методы исследования* (Tambov 1999) 90-100; Е.П. Мареева (Иванилова), *Мужчины и женщины при заключении и расторжении брака в XIX в.(по материалам Тамбовской епархии) // От мужских и женских к гендерным исследованиям* (Tambov 2001) 38-42.

cases of violation of the marriage laws represented only a tiny fraction of what actually took place but it is impossible to calculate any meaningful figures.

Many religious sects thrived in the Tambov region. There is some information known about the demographic behaviour of the sectarians. The *dukhobors* rejected the orthodox rites of weddings while the *molokans* rejected baptism. Such rejections would have made the sectarians outlaws so it is possible that there was some kind of compromise made with the authorities here. It is very difficult to confirm this idea, because all participants in church rites were registered as orthodox. It is necessary to use church and police sources with lists of sectarians in order to trace them. However, it is not unrealistic to claim that there would have been little difference between the demographic behaviour of the sectarians and that of the orthodox believers, since their religious beliefs were the only difference and they lived otherwise under the same conditions.

Parish registers for the sectarians appeared after the law on tolerance was adopted by the State *Duma* in 1906. Cases in Rasskazovo, Kirsanov and Morshansk are helpful in comparing these registers with the nineteenth century parish registers in order to trace the demographic dynamics of the sectarians before the adoption of the law.

Ecology - demography

By the 1850s, the increase in the population had caused a lack of available sites for rural settlements near rivers, so peasants were forced to cultivate land where manmade water sources were needed and by 1862 20% of the settlements were situated near ponds, wells and ravines containing water. It was difficult to develop a large settlement in such conditions so there was only a further small increase of 100 settlements (6%) by 1917.

Ecology - ecology

In the nineteenth century pressure on the environment caused by the traditional society exceeded the acceptable limits and the early twentieth century was marked by the features of an ecology crisis typical of overpopulated agrarian societies. This manifested itself in practically all settlements with soil exhaustion, the growth of ravines, mass deforestation, dry wind erosion and pollution from urban waste.

Ecology - economy

Because of the fertile soil, the region was still at the forefront of grain production in the 1860s–1870s but soon after this it faced land exhaustion and falling harvests because of extensive over-cultivation. The number of cattle decreased as meadows were turned into ploughed fields. By the 1900s the

Tambov region had begun to lag behind the southern and eastern regions where there was an abundance of spare land, and also the western regions where intensive agriculture was developing.

Grain output in the 1910s was almost the same as it had been in 1861-66: 1.15 million tons in 1917 versus 1.05 million tons in 1861-66, while the population had doubled. Peasants tried to compensate shortages of grain with potatoes but this caused further complicated ecological problems as potatoes were mostly grown on sand and gray soil on land which had been cleared from forests.

By the end of the nineteenth century the region found itself among the less developed cattle breeding regions because of a shortage of pasture land and hay. Cattle was of low quality and it was bred primarily for sale. The number of livestock per peasant household had steadily decreased and only a few estates had thoroughbred cattle.

Ecology - society

Mordvinov's report⁶ in the 1870s stated that peasants' incomes had declined due to land and cattle exhaustion. Physicians paid rising attention to increasing degeneration of the peasants. At the same time most urban strata began to support the municipalities in their struggle against pollution of the environment.

Ecology - politics

Land shortages caused state organized migrations, which had started before the Emancipation with the transfer of peasants to state lands in the Volga region. Later, peasants migrated to the South Urals. After the Emancipation peasants of all categories were mainly moved to Siberia.

A microanalysis of the Stolypin reform revealed that there were also attempts made to develop non-fertile and distant lands in the region. Forest exhaustion made the state start forest protection measures, which became noticeable after the 1830s during the state reforms of the peasantry. Kiselev plantations (named after the minister of state property at that time) can still be seen in the region. The *Zemstvos* (since 1864) at once started to help the peasants intensify their agriculture, but the results were poor. The state and the *Zemstvos* had no comprehensive ecological policy and they could not prevent the impending eco-crisis in the agrarian society. The town *Dumas* were the only institutions to start rational protection of the environment early enough at least to improve the ecology of the towns sufficiently to prevent the outbreak of epidemics.

⁶ *Отчет сенатора Мордвинова о ревизии Тамбовской губернии// Крестьянское движение в России в 1870-1880 гг. М. (1968) 34.*

Ecology - culture

Peasants remained almost totally deaf to the problem of the exhaustion of natural resources and to the need for measures to protect the environment. Even the landlords, despite the efforts of the *Zemstvos* and the scholars, showed no eagerness to adopt more advanced methods in agriculture until after the Emancipation. It was not until the time of the Stolypin reforms, after 1906, that some peasants became interested in methods of protecting the environment.

Economy - demography

There was practically no capitalist labour market, because all peasants had their jobs at their own households. Hire of labour was occasional and unreliable. Employment in organized estates and opportunities for work on sugar beet plantations or in industry were of some help in coping with overpopulation, but tens of thousands of such positions were of little avail when there were hundreds of thousands of superfluous hands. Moreover, the majority were seasonal workers who maintained their places in their own households and in this way perpetuated the overpopulation.

The construction of railways brought new possibilities for seasonal work outside the region, such as mass movements in the autumn and winter to the Donbass mines. But all these men returned home in the spring where they were not only workers but eaters too.

The regional urban economy was not able to absorb the extra rural population. The towns existed primarily as administrative-political and not as economic centres. The censuses of 1890 and 1917 show that the need was mainly for unskilled labour, such as servants, etc. A study of the Tambov social structure, based on the primary sources, showed that only a few hundred peasants found employment in the regional centre as craftsmen, traders or low ranking civil servants⁷.

Economy - ecology

Since the first half of the nineteenth century, the main problem had been a change in the structure of exploitation of the natural resources. According to some accounts – for instance by Arsenyev⁸ the best time for that had been in the late eighteenth century, in 1797, when the area consisted of 40% arable land, 31% forests, and 29% meadows. There was almost the same ratio in the separate settlements.

⁷ Н.В. Стрекалова, *Социальная стратификация и социальная мобильность городских средних слоев в 1907-1917 гг* (на материалах г. Тамбов. Канд. дисс), (Тамбов 2003).

⁸ К.И. Арсеньев, *Статистический очерк России. СПб* (1848) 399, 402.

In the 1860s-1870s, the region was an all-Russian leader in grain yields with a jump in crop production of between three and eight times. But this whole increase in production was entirely due to extending the areas sown at the expense of newly ploughed virgin soils, cutting down forests and filling up ravines. By 1917 the sowing area had grown another 10%. Intensive - deforestation reduced the forested area from 18% in 1867 to 14%-15% by 1917. Forests were also cut down for building, for making charcoal, resin and tar and for the production of various tools, etc. Contemporaries predicted future industrial shortages and climatic troubles with such a devastating exploitation of the forests. Even the three-field system (no use of fertilizers) was given up in order to generate more income for the liberated toilers in the fields.

From the 1850s dozens of Tambov villages suffered from extreme water pollution due to the use of ponds for watering the cattle and also because the natural flow of the rivers had been interrupted by the construction of weirs. Lack of minerals meant that there was no chance of developing a modern industry and consequently it became even more urgent to increase the number of non-agrarian working places.

A few model estates run by enlightened landlords helped to introduce rational agriculture. Microanalysis revealed the many-field crop rotation system used in them since the middle of the nineteenth century. There were large fields of industrial crops and cattle, sheep and stud farms where machinery was used. An increase in the production of potatoes compensated partly for the drop in grain production and they were also used for consumption. Potato yields increased from 100,000 tons in 1861 to 530,000 tons in 1917. Ecologically, the production of potatoes helped to use the land better and allowed a transition to the many-field system. The peasants also welcomed the potatoes because they implied a formal preservation of the traditional system of agricultural output and consumption. The existing Russian food stocks limits, predicted for the turn of the century, point to some 315 kg of grain and some 210 kg of potatoes per peasant a year. Such a ratio presupposed a yield of 770,000 tons of potatoes by 1917 – 240,000 tons more than the actual yields.

By the turn of the century, the ecological impact on the urban areas became noticeable with the problems of storage and disposal of the waste from horticulture and of manure and remnants of cattle slaughter. Organic waste utilization appeared in some towns at the beginning of the twentieth century. At the same time dirty industries also appeared causing water pollution.

Economy - economy

Overpopulated and lacking natural resources, the rural economy of the Tambov region remained natural and to a large extent only for the own population with weak market ties. An increase in marketability of the products from the estates of the gentry was noticeable after 1861 and in the 1910s the same process appeared in well-to-do peasant households.

Industrialization penetrated only very slowly into Tambov villages up until the 1900s. The household censuses from the end of the nineteenth century show that in almost all villages only a few households were dependent on industry. Most industrialization in rural areas was related to the construction of the railways, which allowed the population to engage in various forms of economic activity. It is known that some Tambov trading peasants even managed to get to London, but the majority of the peasants still had little access to the railways. In 1917, the average distance of a rural settlement from a railway station was 22 km. Taking into account the poor state of the access roads, this was still a long way to cart heavy loads.

Economy – society

The deepening of the rural economic crisis led to shortages of goods for social differentiation, resulting in pauperization of the peasants and inevitable ruin of the gentry. The complex impact of demographic, ecological and economic factors on the situation of the peasants was demonstrated by the famine of 1891-92. A decrease in agricultural production, cyclic crop failure plus ecological problems and primitive agro-technologies made peasant households defenceless in the face of natural disasters. However, the crop failure of 1891-92 was not only the result of natural factors, but, as micro-study has revealed, it was also related to social factors since some landlord estates retained good crops.

Weak urban economic development meant that the towns remained as places for the officials and dependent strata, mainly consisting of the non-service gentry who lived off the rents from their estates or who were kept by their relatives. Together with numerous servants these non-productive strata made up the majority of the urban population of the Tambov region until the 1900s. The creation of a business middle class was limited by a decrease in the purchasing power of the gentry plus the extremely low purchasing capacity of the hired labourers in the towns. There were, however, some 300 handicraft shops in Tambov in 1900-1918.

Economy - politics

Poor economic conditions in the agrarian regions resulted in the government trying to reform the situation and giving support to the gentry and the

peasants. But all those attempts were usually belated and often counterproductive and aggravated the poor economic situation. Microanalysis of peasant household prosperity criteria leads to the conclusion that normal land allotments prevailed up to the middle of the nineteenth century. At the time of the Emancipation the authorities regarded these as too large and made the regrettably famous *otrezki* (reduce land allotment sizes) as a short-sighted way of dealing with the demographic explosion. By the time the Stolypin reforms were introduced, most rural settlements had no land available for reallocation any more.

Economy - culture

The poor economy left little room for the peasants to develop an interest in modern knowledge. Almost no notice was taken of the advances in agricultural technology and empirical traditions prevailed. Even in the towns, the knowledge possessed by businessmen progressed only slowly until the 1900s. Most merchants had enjoyed primary education but the hired labourers were generally illiterate. Since the 1850s, the economies of the towns had been able to create thousands of positions for teachers, doctors and medium level medical specialists, art and culture workers but the rural areas could support only a few hundred people from the *Zemstvos* intelligentsia.

Society – demography

The existence of land communes and high infant mortality stimulated early marriages with as many children as possible. As has already been mentioned, the age at marriage of young women was lowered close to the bio-minimum. Peasants had no essential modern means of regulating the demographic processes. A conscious transition to intensive economics with simultaneous birth control and family planning was, in principle, impossible. Villagers could lead their lives by the rules of extensive low-productive economics only by cutting down consumption and reducing the propagation of extra mouths. The ways in which the extra population was reduced varied from almost total neglect of the health and lives of both infants and adults (God gives – God takes) to abortions and even the killing of infants. Partly because of the randomness of such a demographic strategy, the peasants in over-populated regions tended to migrate to under-populated areas and especially to neighbouring towns, but outmigration was not on a sufficient scale to remedy the situation.

In addition, it can be seen from histories of the families that migrants (to Altay) needed several years of hard labour before they could become established and build a new life after migration and some people re-migrated. About half of the migrants from the Tambov region in 1888–1892 were not

able to establish their own households and became farm labourers. Nevertheless, migrations did prove that there was a real prospect of improving their position. In 1917 no more than 10% of the landless Tambov migrants were registered in Altay villages.

Society – ecology

Ecological problems could not be solved by the traditional peasantry. It is true that the peasants realized that there was a limit to the continued waste of natural resources and the preservation of the three-field system gave part of the arable land a chance of recovery. The rural 1917 census data reveal that in that year 1/3 of the arable land in all parts of the Tambov region lay fallow. The peasant land commune rules hampered progress in agriculture. Some model estates helped to rationalize agriculture, but most landlords leased land with no thought of modernization. Nobody paid much attention to the rational and secure exploitation of the land.

Society – economy

The land commune with equalizing redistribution of small peasant allotments was a serious obstacle to many-field crop rotation and other intensive means, which were rational from the point of view of exploitation of the land. The other noticeable barrier to agricultural modernization was poor finances. The Peasant Bank activities in Stolypin's times, which were intended to support out-migrants and farmers in their new places of residence (to buy tools, fertilizers, cattle), were not very effective and proved too indecisive to break ingrained habits.

The general intensification of regional agriculture was also hindered by the reluctance of the majority of the gentry to rationalize their economies. Such landlords earned money mostly by renting out arable land and gave the peasants no stimulus to make high-productive use of this. A few model estates did help to intensify agriculture somewhat by introducing the use of machinery, by growing sugar beet and organizing horse and cattle breeding. Such neighbours proved stimulating to peasants as they could learn and use various modern ways of production.

Up to 1917, idle non-productive social strata in the towns was combined with the broad exploitation of cheap servant labour while the well-to-do town dwellers did not take part in social production or state services. A study of a selection of the well-to-do houses in Tambov revealed that 40% of the families of the rich house-owners did not work at all and 32% of families in the higher and middle strata who rented accommodation were not fully engaged in productive labour or state services either. Each house had on average more than 2 servants. Due to the social instability even the merchants needed

a long time before they could form large businesses. The histories of the separate merchant families witnessed frequent transitions from the merchants to the *meschane* and back again. Merchant families of 3-5 generations were far more common in Tambov around the turn of the century than single families of 1-2 generations. Up to 1917 all the urban strata preserved their ties with the land. For the gentry landlords, the most natural thing to do was to invest in valuable real estate and commodity production. For most ordinary town dwellers, their personal plots implied ties with the natural economy and formed a necessary help under the conditions of low wages for hired labourers and for lower officials and small businessmen.

Society – society

Up to the 1860s, status in rural or urban societies had been strictly determined by social class, but from then on the traditional class groups experienced a noticeable breakdown. The study revealed that thousands of peasants and members of the gentry made the transition from rural classes to different social-professional groups. From the end of the nineteenth century the classification as merchant became less significant. Dozens of big businessmen were still listed as *meschane* and peasants. Nevertheless, peasants and *meschane* had little chance of making an official career so long as ruined landlords remained at least middle-ranking officials thanks to their noble origins.

Tambov villages experienced only slow social mobility. Change up to 1861 was hampered by control from the landlords, the state and the commune structure. The breakdown of the land commune after the Emancipation was only shallow and the system vividly demonstrated its durability by resisting the Stolypin reforms during the severest phase of the agrarian revolution. In 1917-1918 many farmsteads and individual economies (*otruba*) were taken back into the commune.

The middle strata dominated in the towns up to 1917. As primary sources (the lists of voters and officials, the address books) show, those layers were mostly composed of owners of small properties.

Society - politics

The regional and sub-regional political elite was dominated by the nobility up to 1917. The representatives of the well-established Russian families played the main roles in the assemblies of the nobles and even those of the *Zemstvos*. The nobility also substantially influenced the town self-government. Seven of the 13 Tambov City *Duma's* leaders in 1870-1917 were nobles, five were merchants and one belonged to the *meschane*. This social-political situation enabled the nobility to control the reforms at the expense of the other social classes. They even made a reservation of a large amount of money to prevent impoverishment of the landlords. The agrarian region

preserved the traditional impact of the various strata on politics, which was used by the authorities to promote the growth of the army, or to support war campaigns.

Society - culture

A great many manorial estates which functioned as centres of high cultural activity can be traced in this period. Other social classes, including that of the merchants and many of the clergymen, remained in the realm of traditional culture. Mass access to modern culture began in the 1860s with peasant and urban support of the efforts of the *Zemstvos* and the *Dumas* to organize secular primary schools.

Politics – demography

It was a historical tragedy in the late nineteenth and early twentieth centuries that neither the Russian government nor society as a whole had any means of coping with or even exercising any minimal influence on demographic and ecological problems. The state did not even raise the question of the necessity for birth control. The migration policies were quite inadequate for a radical solution of the problem of agrarian over-population. The *Zemstvos* tried to solve some demographic problems by stimulating public health care. The feedback was often paradoxical as improvements in health care decreased mortality while peasants gave no signs of decreasing their fecundity and early marriages, instead tending, if anything, to increase in these respects thus speeding up and aggravating overpopulation, rural unrest and further migrations to the towns with the resulting social-political effects.

As a result of this high fecundity infant mortality increased again, and this was even shown in the parish registers. Infant mortality was at its highest where outmigration was low.

Table 3 Average infant mortality as a percentage of registered births

Phases/Village	Kermis (150 km N of Tambov)	Pakh. Ugol (60 km NE of Tambov)	M. Pupki (50 km NW of Tambov)
1857-1884	15-21%	24-30%	36-38%
1899-1912	25-36%	26-53%	39-41%

According to data from the Tambov regional *Zemstvos* hospital, the percentage of stillborn babies and abortions (total number of deliveries 20,000) in 1893-1904 fluctuated between 11%-26%. In 1907-1913 that figure had become 21%-36%.

The demographic situation was also influenced by war. Russian society did not experience recruitment in peace times as a great burden. Even after the introduction of general recruitment, in 1874, the army took no more

than 2% of the adult males and, besides, frequent holiday periods for the soldiers was common practice. Parish registers contain many birth registrations of 2-3 children within the period of a married soldier's service. Such infants must have been legitimate because village society kept an extremely close watch on the behaviour of soldiers' wives so that an illegitimate birth – in cases where the calculated time of conception did not coincide with the husband's holiday period – would always have been precisely pinpointed and registered as such.

Due to selective recruitment and the relatively small scale of wars against a background of a rocketing population increase, the demographic impact of wars – losses – had been almost negligible, although there was a slight rise during the nineteenth century. These losses were in any case insignificant in comparison with other greater demographic regulators such as infant mortality, epidemics and famines. The Napoleonic wars, including the War of 1812, the Crimean war, the Caucasus and Russian-Turkish wars did not noticeably affect marriage behaviour, fecundity and other basic vital statistics, except for a small contribution to the death rate. The impact of the Russian-Japanese war made more difference but this was still dwarfed by the First Revolution and the impact of crop failures against the background of the mighty demographic explosion of 1903-1913. Only the First World War and subsequent revolutionary events brought about a radical change, totally destroying traditional Russian demographic patterns.

Politics - ecology

There was no state environment protection policy. All that existed were some suggestions made by scholars to organize a few nature reserves. The *Zemstvos* and other public organizations did make more noticeable efforts. From the 1860s the *Zemstvos* organized agronomic and veterinary help, but that work was in an embryonic stage with no substantial results in helping to make agriculture more intensive. From the 1870s the town *Dumas* used strict ecological criteria when planning locations for industry, in constructing the water supply and controlling slaughterhouses, and introduced sanitary controllers.

Politics - economy

When making agrarian reforms, the state declared that its will was to raise landlord and peasant interest in management. But since the landlords received most of their support at the expense of the peasants, they maintained their state of economic leisure and gave little stimulation to the peasantry. The peasants left the land communes during Stolypin's time mostly because of the need for land and not to support the new economic ideas of the state. During

this period, the trade-industrial policy inflicted severe tax pressure on businessmen. State orders were distributed to a few enterprises only, those which supplied the army (fullers and distilleries).

The negative economic impact of the military factor was noticeable particularly during times of large wars (1812, 1853-56, 1904-1905, WW1). Army recruitment did not essentially affect peasant economics until the end of the nineteenth century. Labour strains came to the surface during the great wars when mass reserves were mobilized. In 1904-1905, over 20% of the male population of the Tambov region were mobilized for the Russian-Japanese war. It was the first war to influence peasant life on a family level, bringing labour strains to many households. The First World War affected peasant economies on a much greater scale. The 1917 agrarian census recorded that one in three male peasants between the ages of 20 and 40 was recruited to the army.

Politics - society

The state supported the traditional strata of society: the nobles, the officials and the clergy were supported directly and the peasants via land commune preservation. The interests of the new business and non-service intelligentsia strata were reflected in local self-government with an internal struggle against the nobility and the officials. It was not until the turn of the century that there was a kind of compromise between the liberal gentry and the merchants in the town *Dumas*.

A transition to an army based on universal military service in the 1870s-1880s coincided with a modernization process which resulted in the disintegration of the extended patriarchal family. This in turn was accelerated by official permission for family partitions. In 1904-1905 the authorities tried to rely upon help from relatives in former extended families for wives of recruited men, but such attempts failed in the Tambov region. A similar situation occurred on a much larger scale during the first World War, when nuclear families deprived of breadwinners lost any substantial support from the relatives of recruited husbands and fathers.

The state and *Zemstvos* only had limited means for realizing their plans for supporting the families of recruited reservists and could not assist all the recruits. This meant that peasants had to turn back to the traditional way of surviving. Peasant communes reacted sharply to what they saw as unjust principles of providing help to the families of recruits. In 1904-1905 this mood was the first sign of the coming commune revolution in defending peasant communal interests and sentiments. The First World War resulted in an immediate push towards commune revolution.

Politics - politics

There were constant social-political strains and rising village unrest, which came to the fore in times when the state authorities were weak, especially during years of distant and lost wars such as the Crimean war, the Russian-Japanese war and finally the First World War. Up to the 1910s, peasant unrest was traditionally local or regional (on the scale of a *volost* at maximum), in the form of spontaneous riots triggered by local reasons. In the early 1900s the region experienced the first separate blasts of the permanent agrarian revolution driven by hunger for land and other resources. Rural activities by political parties were minimal. Only a few pro-Social-Revolutionary peasant brotherhoods managed to draw peasants into class pogroms, a few acts of terrorism and expropriations.

There was also a general tradition expressed in state-governed bursts of patriotism when wars broke out. A study of army donations made by traditional social strata revealed their response to government appeals. Nevertheless, people considered compulsory donations and bureaucratic ways of supporting the army as a burden. A study of individual political activities confirmed that signs of political opposition in the region were isolated and originated from outside the region. The so-called 'Tambov Decembrists', Russian populists, who as a rule lived in the capitals and rarely visited their Tambov estates, got no substantial support in the region. The region was the scene of many liberal and revolutionary activists, but they had no mass support. The opposition circles of the intelligentsia were too fragile to act as party organizations, their members had only vague political aspirations and were more attuned to talks than to a decisive struggle. Nevertheless, on an all-Russian scale, a combination of factors – demography, economics, politics, war, culture – made the over-populated rural regions (on micro, meso and macro levels) act as incubators for radical political activists who shaped the events of the Russian revolutions and the Civil War.

Politics - culture

State cultural politics remained social-class oriented throughout the period. The primary sources show that in real life this meant that access to education, to modern medical services, to scholarship, literature and arts and modern culture was primarily for the nobility, less so for the clergy and only in small doses for the peasantry and the townsmen. Thanks to the reforms in the 1830s-1840s, state peasants were provided with state primary schools, hospitals and dispensaries. In the second half of the nineteenth century the state supported parish schools, but there were limitations for the peasants and the *meschane* on entering secondary schools and universities. After the Emancipation, the state offloaded expenditure on culture to the *Zemstvos* and the

town *Dumas*. At a micro level the success of self-government in upgrading culture can be seen. The most striking is a growth in the number of primary schools established by the *Zemstvos* and the towns, leading to general primary education. Even the First World War did not have a substantial effect on this sector. There was much less success in rural health care. The *Zemstvos* hospitals and dispensaries, restricted partly by the traditionally limited demand on the part of the peasantry, could only cover some 5%-10% of the rural population by 1914.

Culture - demography

A predomination of traditional values in full swing is shown in the absence of birth control and family planning. Natural factors absorbed into the traditional mentality tend to be seen as the key to peasant demography. On the other hand the primary sources reveal the beginnings of rational demographic behaviour in the more educated social strata.

The relationship between the orthodox church viewed as an element of culture and the parishioners' demographic behaviour could be regarded as 'a marriage of convenience'. From the start the church with its bans, rules and calendar was never a helper but a hindrance or a peculiar marriage regulator in the peasant year cycle.⁹

Culture - ecology

The majority of the landlords paid little attention to agrarian intensification and only realized the consequences of their activities on the ecology after the 1900s. The peasants were only sensitive to the eco-problems at the empirical level. It was only in the narrowest of circles among the agronomists, statisticians, engineers and doctors, less than a hundred people in total, that the beginnings of a civilized eco-conscience began to take place.

Culture - economy

The primary sources show that in the period under study the overwhelming majority of the population in the Tambov region felt no need to engage the assistance of educated people to introduce innovations into the economy. Most landlords almost never asked for veterinary or agronomic help and almost no engineers were engaged by private enterprises.

Culture - society

There was a basic contradiction, at the level of groups and individuals in the cultural domain, between a general rise in education and modern culture

⁹ В.Л. Дьячков, *Крестьяне и церковь: взаимная любовь или брак по расчету?// Российское крестьянство на пути от капитализма к социализму, 19-20 вв (Тамбов 2003).*

penetration versus a preservation of traditional cultural elements in all social strata. Church data reveals that there was some modern cultural impact in the mental secularization of all social groups, including the peasantry, with more integration of the clergy into a modern society.

Culture - politics

A lack of peasant education (illiteracy) restricted their rational political activities so that peasant struggles remained spontaneous and emotional. The traditional culture blocked the penetration of modern European-style political parties. The Socialists-Revolutionaries, who praised commune traditions and agrarian terror, gained some success in the peasant world. Sometimes peasants followed the Nationalists, who exploited primitive village nationalist sentiments. The Social-Democrats and Liberals, like other followers of European-born ideas, had no peasant support.

Anti-state or anti-governmental activities by a small part of the gentry originated not from material hardships but from book knowledge about social justice and the specific Russian intelligentsia's obligation for redeeming their faults in public. Such ideas had no chance of taking root in village culture.

Culture - culture

There was a socio-cultural split in the strata of Russian traditional society, which originated from the times of the *Kievan Rus* and was radically and dramatically widened in the eighteenth century. That split proved an impenetrable obstacle for a modern, urban, state culture to penetrate into the rural world. The bearers of that culture were alien to peasants whose lives were generally run on traditional lines and by the laws of bio-existence.

In contrast with the gentry, where secularization resulted in the transition to a modern culture, peasant secularization was mainly related to a protest against the rich and the official state Church. In the Tambov region, peasant dissidents were usually not non-religious but non-official patriarchal sectarians.

In conclusion

As the explanations show, the matrix in Table 1 reflects very complicated interactions in Tambov society with two dimensions, a rural and an urban. In the course of the nineteenth century, however, slight signs of a beginning convergence can be detected and these were to become very clear in the twentieth century.