Debate on the Population Well-Being and the Russian Revolution

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ABSTRACT

The article is devoted to the debates on Boris Mironov's book 'The Standard of Living and Revolution in Imperial Russia, 1700–1917'. Using the aggregate data of male height at recruitment and the estimated net grain harvests, Boris Mironov tries to prove that in the period from 1866 to 1913 there was a significant rise in the Russian population's living standards. The author of the present article shows that Mironov's conclusions are based on misinterpretation of available anthropometric data sources and that in fact the average height of the draftees hardly increased. There is another similar error, which is connected with Mironov's incorrect assessment of the fodder consumption when calculating the grain and fodder balance. These errors invalidate Mironov's assertion that subsistence needs of the Russian peasantry were met quite 'sufficiently both in quantity and in quality'.

In 2008, on the 'Cliodynamics' website there started a discussion on the reasons of the Russian revolution (see Grinin, Korotayev, and Malkov 2010). The discussion resumed, when one of its participants, a well-known Russian historian Boris N. Mironov published his large monograph *The Standard of Living and Revolutions in Imperial Russia, 1700–1917* (Mironov 2010a, 2012). This book shortly after its publication was translated into English and Chinese, and then was declared 'the best book of the year'. Based on the anthropometric data, Mironov asserts that the standard of living in the period between 1866 and 1913 was gradually increasing, and there were no objective preconditions for any revolution. However, the debates around the book, which continued on the pages of the

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Russkaya Istoriya [Russian History] journal (Sekirinsky 2010), have become rather fierce and have not stopped yet. Many experts paid attention to numerous inaccuracies and errors in Mironov's arguments (Ostrovsky 2010, 2011; Khanin 2010; Horos 2010). However, recently some new facts have been revealed that confirm that Mironov has misinterpreted the available anthropometric data. The discovery of new documents challenges the basis of Mironov's concept.

It is necessary to remind that Boris Mironov's main idea is that in the late nineteenth and early twentieth century the consumption level in Russia was permanently increasing and 'the conclusion about the growing standard of living, based on anthropometric measurements, is supported by the data on consumption patterns and agricultural production ...' and that 'the nutritional status of the peasantry in the early twentieth century may be considered satisfactory' (Mironov 2010a: 462, 635).

However, one should note that the anthropometric data, which brought Mironov to the conclusion, are disputable. The increasing average height of the male population is Mironov's main argument, since, from his point of view, this indicates an improvement in living standards. Boris Mironov argues that 'during the five decades from 1866 to 1915 the average male stature increased by 4.5 cm – from 164.5 to 169 cm… The breakthrough in biological status and livings occurred after the Great Reforms, just as Russia had entered the epoch of market economy' (Mironov 2010a: 274). The phrase 'increase of male height in the period from 1866 to 1915' means that the males, born between 1911 and 1915 were 4.5 cm higher than those born between 1866 and 1870. However, if we compare these figures not with the data for the period between 1911 and 1915, but with data for the interval between 1901 and 1905 the increase in height will be more moderate, namely, only 2.3 cm, which means that 'the breakthrough in the level of biological status' occurred mainly between 1905 and 1915. However, according to Mironov such an increase in height is an evident proof of improved living standards and consumption pattern of the population, which in their turn are a vivid manifestation of the imperial authorities' major accomplishments. However, in Mironov's other work we can find the following data: the mean stature of the males born in 1926–1930 was 167.4 cm, while those born in 1941–1945 were on average 169.5 cm high (Mironov 2004). Following Boris Mironov's logic, one may come to the conclusion that during

World War II people lived much better than in the years of the New Economic Policy and in the last decades of the Russian Empire.

The reason for such confusion is that Mironov believes that one should explain the changes in mean stature by the changes in the living conditions during the first year of an individual's life. This Mironov's error has been repeatedly pointed out by many Western experts (see, *e.g*., Hoch 1999; Ellman 2005; Wheatcroft 1999). Thus, Steven L. Hoch even emphasizes that 'this is a serious statistical flaw that undermines the entire discussion that follows' (Hoch 1999: 67). Indeed, it is quite clear that the stature of individuals born in 1941–1945 was determined by the quality of their life in the 1950s, while the increase in height of those born in 1911–1915 should be traced in their life in the 1920s. Thus, the 'breakthrough in the level of their biological status', described by Boris Mironov (meaning their height of 169 cm), is not so much the merit of the royal authorities, as the achievements of the New Economic Policy.

Moreover, if we take a closer look, we will note that Boris Mironov's calculations are based on distorted data from available resources, that is from the provincial government offices' reports on compulsory conscription. These reports inform of the number of recruits in different height groups. For example, to be eligible for conscription in Group 2, a male usually had to be 2 arshin, 3 vershok high (155.6 cm), in Group 3 – 2 arshin, 4 vershok high (160 cm) *etc*. Mironov says that in 1874–1913, Group 2 included recruits, whose height was between 2 arshin, $2^5/_8$ vershok (153.9 cm) and 2 arshin, $3^4/_8$ vershok (157.8 cm), and Group 3 included males with height between 2 arshin, $3^5/_8$ vershok (158.4 cm) and 2 arshin, $4^4/_8$ (162.2 cm) *etc*. (Mironov 2010a: 176). However, in the early 1890s the forms of conscription reports were actually changed by Decree No. 21 of the Minister of Internal Affairs dated August 18, 1890 (RGIA, f. 1292, op. 4, d. 1342). Since that time, Group 2 included the recruits with the height ranging between 2 arshin, 2 vershok (151.1 cm) and 2 arshin, 3 vershok (155.6), Group 3 – between 2 arshin, 3 vershok (156.6 cm) and 2 arshin, 4 vershok (160.0 cm), *etc*. (RGIA. f. 1292, op. 4, d. 656, ll. 9; d. 746, ll. 6–7; d. 839, l. 9–10; d. 928, ll. 8–10). Thus, the average height in each group decreased by half a vershok (2.2 cm), but Mironov have missed that change, so in his assessments, starting from 1890, the average increase of draftees' height was half a vershok more

than it occurred in reality. This led to miscalculations and thus, Mironov's results showed that in 1890 there was a dramatic leap in the recruits' average height by about half a vershok (2.2 cm). This leap in Orel Governorate was about 1.9 cm, in Arkhangelsk, Kaunas and Yeniseysk Governorates – 2 cm, in Tersk Governorate – 2.1 cm, in Tula Governorate – 2.2 cm, in Vilna – 2.5 cm, in Livonia – 2.6 cm, in Astrakhan Governorate – 2.8 cm (Mironov 2010a: 720, 722, 730, 736, 754, 756). However, the transition to the new reporting format did not occur simultaneously everywhere and took several years (Nefedov 2011, 2012). Thus, in general it resulted in a formal '2.2 cm increase' of mean conscript height. In Mironov's calculations this 'leap' in height is observed only in the 'summary data' taken from the mentioned report. However, in the 'individual data' that Mironov collected and calculated himself, there are no leaps and no increase in recruits' height (Mironov 2010a: 185, 186). Thus, it is quite evident that the change in the forms of reporting explains the above-described fictitious 2.3-cm increase in conscript height between 1866 and 1905. However, the increase in the average height of those born in 1905–1915 is due to the achievements of the New Economic Policy. So there is no reason to speak about any significant increase in the biological status level of the population of Imperial Russia in the late nineteenth early twentieth centuries.

The changes in the forms of military reporting are reflected in hundreds of records kept in archives (*e.g.*, RGIA, f. 1292, op. 4, d. 676–754, 770–844, 859–925, 950–1028), but Boris Mironov (although he has, inter alia, referred to these records) gets the data not directly from the reports, but from the summaries published by the Military Ministry, and in those publications the changes were not reflected. Thus, the plain truth is that Boris Mironov's concept is based on an error, which resulted from the lack of attention to primary sources.

One can notice the same lack of attention to the sources in connection with another aspect of consumption rates. As it was mentioned above, Mironov alleges that 'the conclusion about improving living standards drawn on the base of anthropometric data, is supported by the data on consumption of basic foods and agricultural products...' Then he calculates the production and consumption of cereal and potatoes. In his monograph Mironov has arbitrarily increased the official data on yields by 10 per cent, assuming the 'food consumption norm' to amount to 287 kg per

male, and the fodder consumption of 18 kg per head of rural population (Mironov 2010a: 293). This last fact immediately caught his opponents' attention and they pointed out that according to the Ministry of Food in 1917 the fodder consumption was 154 kg per capita of rural population (Lositskiy 1918: 29, 79), in other words, Boris Mironov underreported fodder consumption by eight-nine times (Nefedov 2011: 128). Thus, his calculations can hardly bring to a conclusion that 'the nutrition status of peasantry in the early twentieth century may be considered sufficient'. For some time Mironov would refuse to admit this mistake, claiming that his calculations were correct and that by introducing the norm of 18 kg, he even overestimated the quantity of grain used for fodder (Mironov 2010b). However, later being unable to deny obvious facts, he declared that 18 kg was a 'typographical error' (Mironov 2011: 138). To correct the pointed 'typo', he was forced to admit another 'typo': he claimed that 287 kg was another 'typographical error' and that the said figure did not mean the 'norm of grain per eater' but 'the norm of grain and fodder per consumer': 50 kg of 287 kg was supposed to be used as fodder, and 237 kg for food. As for the mentioned figure of 18 kg, Mironov insisted that it was not the 'norm of fodder', but the 'norm of poultry feeds' and the 'norm of grain delivered for storage in bake houses'. Thus, the Honourable researcher has put into scientific use a new and highly original concept, which has never been used before in grain and fodder balance sheets. The fact is that grain was not only delivered to bake houses it was also taken from them – so the input was actually equal to the output. Consequently, the exotic 'norm of poultry feeds' and the 'norm of grain delivered for storage in bake houses' actually appear to be negligible amounts that were never known for sure, and due to insignificance of this indicator it was always included into fodder consumption.

However, this 'scientific revolution', namely, the introduction of negligible amounts, did not help to resolve an obvious contradiction: 50 kg reserved by Boris Mironov for fodder plus 18 kg of poultry feed amount only to 68 kg and not to 154 kg, as quite a reliable source shows. Elsewhere I have demonstrated that the correction of this error will never result in 'meeting the subsistence needs', even if we admit an arbitrary 10 per cent surplus of the gross yields (Nefedov 2011: 128).

What is Mironov's reply? He performs new calculations:

> The budget studies for the period from 1901 to 1910 show that we have *actual* (italics in the original – *S. N.*) information on production and use of cereals and potatoes for all kinds of needs, except for fodder: for the consumption of peasants and townspeople, for export, brewing and distilling industry, army and seeds according to official data... The need in fodder may be estimated according to the standard demands, on which S. N. insists ... So we get the following results: in 1901–1910, the production of cereals and potatoes according to the official data revealed by the Central Statistics Committee was insufficient to satisfy the population's all needs ... (Mironov 2013: 256)

However, we would like to remind that Mironov made the previous calculations in order to assess the consumption of food grain, and to show that it exceeded the 'norm'. And, now it turns out that it was not necessary to perform any calculations at all because we have already got 'the actual consumption' data and there is nothing to argue about. But what kind of data is it? These are the results of budget studies, which are shown in Alexander V. Chayanov's summary (Chayanov 1916). It is a well-known fact that in different years between 1901 and 1910, the budget studies were carried out in six provinces. However, the scope of those surveys was inconsistent with the criteria of representativeness. In four of the six provinces the number of households described was less than a hundred. In Olonetsk province, for example, 19 households were surveyed, in Moscow area only 45. In Vologda province, where 572 households were examined, it was found out that consumption in the neighboring districts may vary by half. Many researchers have earlier come to the conclusion that the mentioned budget studies distort the actual picture. G. Robinson (1975) and N. N. Korenevskaya (1953) argued that it was due to the increased proportion of more affluent households chosen for studies. In some surveys, for instance, in Kostroma and Vologda regions the households, which did not have any sown area, were excluded from the studies at all. Imperfect methods of studies were convincingly exposed by M. A. Davydov (2003), who found out that a certain amount of grain, which according to the budget studies was consumed as food, in reality was used for fodder.

A famous statistician Evgeny E. Yashnov wrote:

> Alexander Chayanov's summary of the available budgetary data represents rather a meager number of disparate, unre-

> lated and often outdated indicators of the quantity of per capita bread consumption... Thus, the use of the budget data for this purpose will inevitably be limited, the more so as to extend the data on bread consumption in a relatively small number of households studied to the entire population of the provinces represented, which is highly problematic (Yashnov 1916: 59).

Nevertheless, Mironov extends to 50 provinces of European Russia the data, which may not be extended even to the provinces, where the studies were conducted. This argument, of course, may not be taken into account, and we should make the conclusion that, similar to the case with anthropometric data, Mironov has again misused information from the official agricultural and fiscal statistics.

Thus, Mironov's main conclusion that anthropometric data and agricultural statistics are indicative of well-being of the population in the Russian Empire, seems inconsistent with the real facts. His conclusion is based on the misinterpretation of the primary sources and distortion of their actual content.

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Archives

RGIA – Russian State Historical Archive.