

Self-isolation at the dacha: Can't? Can? Have to?

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Abstract

Measures taken by most countries to limit the coronavirus infection spread include self-isolation. An option of voluntary restriction of personal contacts for citizens is to move to the country (second or third) houses, which have a particular name in Russia – “dacha”. The demand for country estates as places of self-isolation can be assessed as the emergence of a new sanitary-epidemic function in second homes.

Institutional management of such movements in connection with the coronavirus pandemic varies by country, ranging from prohibition (Norway) to encouragement (Belarus), and quantitative indicators (mass character or singleness) fluctuate according to lifestyle, national traditions, characteristics of settlement, urban housing policy, public health opportunities and many other factors.

For Russians, the migration of residents of megalopolises from the city to country houses was a reaction to the pandemic, a characteristic social-group strategy of health-preserving behaviour. Several million Muscovites, Petersburgers, as well as residents of other megacities of Russia moved outside the cities immediately after the outbreak of the pandemic. “Half-townspeople” – internal migrant workers and “seasonal workers” (workers living in villages or small towns but working in metropolises in watch mode) also moved to rural areas.

The mass nature of centrifugal spatial-migratory deurbanization model of behaviour of Russians during the pandemic is determined by the specifics of the spatial distribution of the population in Russia, historical features of urbanization and deurbanization processes, in particular, the widespread distribution of second (and third) country houses (dachas) among the citizens. Russia leads both in relative and absolute number of dacha dwellers among the European countries. The number of country houses in Russia is estimated by specialists at 17–20 million, and the number of dacha dwellers at 50–60 million; at least half of the citizens have second (and often third) country houses.

Massive movements of citizens into out-of-town spaces had both positive and negative consequences. A significant share of citizens reduced risks of infection and were able to avoid “imprisonment” within the apartment with accompanying socio-psychological overload and physical inactivity. However, mass movements also contributed to the rapid spread of coronavirus beyond the original foci.

The article considers the approaches of European countries to countryside self-isolation, describes chronicles of restriction on movement of citizens in Russian regions and waves of summer migration

during the pandemic, suggests an assessment of dacha migration from the capital, and discusses its short-term socio-economic consequences.

Keywords

pandemic, COVID-19, self-isolation, self-preservation behavior, human capital, deurbanization strategy, second homes, centrifugal flows, migration, country houses, personal secondary households

JEL codes: O13, O18, P25, P28, Z32

“... Some people move to the dachas as a hospital to improve their health.”

(Lyubetsky 1880: 3)

“For the summer... out of fear of contagion Petersburgers, starting in the second half of the 19th century, began to leave for the dacha en masse.”

(Krapivina 1875: 471)

Self-isolation outside the city: diversity of approaches in Europe

On 11 March 2020, the World Health Organization (WHO) declared the outbreak of a new coronavirus infection, after which all countries began to take action on limiting the virus spread. Sets of measures varied in degree of severity and obligation, but almost always included self-isolation, involving voluntary refusal to go outside without acute need and limiting contact with other people. This is unusual for a modern person, but the pandemics of the past centuries have shown that possible places for self-isolation are individual dwellings remote from mass development – a prototype of modern second homes, which include Russian dachas.

Migration from metropolitan areas as the hotspots of infection into out-of-town spaces – a widespread model of self-preservation behaviour at a time when threats to life and health increase dramatically, – it manifested itself in periods of wars, pandemics, large-scale conflicts, environmental catastrophes. In this reaction, the rational combines with the instinctive, leading to a variety of consequences: in some cases it allows for the rescue of individuals and groups, in other cases it leads to chaos and significant worsening of the situation. In particular, during the pandemic, such a pattern, taking a mass character, can lead to a rapid spread of infection that cannot be localized.

In the case of COVID-19, the escape of citizens from cities varied by country: in some spontaneously, in others, it was regulated by the authorities, and movements could be either encouraged or restrained. The popularity of the spatial-migration deurbanization model of self-isolation depends on numerous factors – the pattern of resettlement at the time of the pandemic, the state of the health care system, mentality and traditions, urbanization/deurbanization stage, and finally, the actual number of second country houses.

In European countries, the prevalence of second country houses varies, peaking in the countries of Northern Europe (Finland, Sweden, Norway, to a lesser extent Denmark and Iceland) and Southern Europe (Portugal, Greece, Spain, Italy), with an average of 700–900 second homes per 10 thousand people (Rusanov 2019). However, over three quarters of them are used for recreational and tourist purposes, i.e. for holidays, weekend trips and visits at certain times of the year (Regroupement... 2016; Remax 2015; Helsingin yliopiston kirjasto 2015).

Russia is leading among the countries of Europe (and according to some data in the world as well) in the number and prevalence of second and third country houses (for them there is a special name – "dacha"), and by the relative and absolute number of "dacha dwellers". The number of dachas in Russia is estimated by specialists at 17–20 million, and the number of "dacha dwellers" at 50–60 million people (at least one third Russian families and at least half of urban families have second homes). At the same time, the feature of Russian dachas is the multifunctionality of use – from recreational to productive (personal subsidiary farms) (Averkiewa et al. 2016; Nefedova and Nikolaeva 2019).

Quantitative parameters and functional dominants in different countries seem to lead to different estimates of the role and place of second homes in the list of state anti-epidemic measures, according to publications in the public media, differentiate from absolute prohibition to active encouragement.

An example of a categorical ban on visiting second homes following the announcement of the national lockdown on March 12, was Norway. As early as 14 March, the Prime Minister ordered all citizens staying at seasonal country houses to return to their places of permanent residence under the threat of a fine of 1,952 US dollars or a 15-day prison sentence. This was explained by the fact that second homes are located in rural areas, where compulsory medical care is designed for a small population, which can increase many times due to the number of visitors (Bloomberg 2020).

Several countries have adopted a recommendation position on second homes. In the UK in mid-March, the medical community in Wales urged the government to classify travel to second homes and caravan settlements as "non-essential travel" and recommended that everyone return to the cities as people traveling outside their area increase the viral load in the community (BBC 2020b). A month later, it was proposed to prohibit the use of a second home until the viral risk was reduced, and to allow the police to forcibly return offenders to their place of permanent residence (BBC 2020a).

The outbreak of coronavirus in Sweden has led to recommending that second-home owners stay home because of the risks that a potential outbreak may pose to the health of residents in localization areas of these houses. For example, the island of Gotland, with an 800-kilometer coastline and 60 thousand inhabitants, is served by a local hospital, which will be forced to send an additional 40 thousand people who came to the seasonal possessions, back to their native municipalities (The Local 2020).

These countries, in addition to the dominant tourism function of second homes, are united by a similar housing policy which provides for the residence of urban families, for the most part single-generation and even consisting of one person, in spacious apartments. Multigenerational households are not practiced here, and the second houses are dominated by individual dwellings in rural settlements, caravan villages and mobile homes on wheels that are not adapted to long living. This introversive mentality and tradition of following official recommendations has allowed Sweden to limit anti-epidemic activities to the advice of washing hands and maintaining social distance, without adopting laws requiring people to stay home (RBK 2020). A different situation arose in Italy, where in mid-March many citizens came to their second homes, causing a protest of the local population due to the possible spread of infection with the limited capacity of the health care system, and law enforcement agencies had no right to oblige them to return home (La Stampa 2020). Soon, the Government issued a decree, but by the end of April, after some stabilization of the pandemic situation, there were massive demands, especially in mountainous areas, to abolish it due to economic problems (Bloomberg 2020).

In some countries with former planned economies and housing policies, allowing simultaneous residence in small urban apartments of several generations, the recreational function of second houses almost merges with housing and food. In fact, second homes in such countries are standard size Soviet dachas, most of which emerged from new construction on designated land and the owners are united in organizations that protect their interests. For example, in Poland, despite quite strict lockdown type and early introduced anti-epidemic restrictions (March 10, a week after the first case of coronavirus was detected), many land plot owners were interested in the opportunity to go through self-isolation there. Taking into account the needs of the population, the Polish Union of Dwellers (PZD) published on its website 25 documents for the period from 11 March to 30 April regulating various aspects of summer life – from the right to stay in dacha during the pandemic to detailed recommendations on disinfection, garbage disposal, etc.: “Since the individual land plot allows you to be out in the air without coming into contact with third parties, which is especially important for townspeople from apartment buildings that make up the vast majority in PZD, the problems faced by the whole Poland make temporary adjustments to the principles of the functioning of dacha associations necessary” (UCHWAŁA 2020: 2). One of the latest recommendations on the PZD website testifies of the importance of summer plots after the pandemic: “Attention! Drought! Vegetables and fruits will go up! Come to your own aid!”, which contains both traditional tips for maintaining a subsidiary household and innovations like participation in the PZD climate programme supporting the country’s economy (Polski Związek Działkowców 2020).

Great importance to country houses during the pandemic is given in Belarus, where there are no mandatory restrictive measures at all: “In the midst of a pandemic, the dacha is the best option for self-isolation, and yet it is a good investment of money when everything is unstable in the financial market” (21.BY 2020: 3). The arguments “for dacha self-isolation” are the reduction of the risk of infection in the absence of a large cluster of people and the favourable effect on the psyche of free space significantly exceeding the size of a cramped apartment, the arguments “against” are insufficient sanitation facilities, remoteness of medical inpatient facilities, risk of infection when using suburban public transport (AIF.BY 2020).

In Russia, infection rates vary by region. The main foci of infection were the capitals – Moscow and St. Petersburg, which still remain record holders for the number of infected citizens. In many other regions, the number of infections remained low or even absent, although the situation changed daily for the country as a whole. This has prompted central authorities to formally allow regional authorities to regulate the situation independently as part of a common strategy, including whether or not to impose quarantine measures, to make it difficult or, conversely, to facilitate the departure of dacha dwellers with further compliance with anti-epidemic rules. As a result, some regions even help citizens relocate to their country houses (Oryol Oblast, Perm Krai, etc.), and others completely close administrative borders (for example, the Petushinsky District of Vladimir Oblast popular with Moscow dacha dwellers).

Regardless of the goals of institutional regulation in different countries, the mass choice of citizens in favour of second homes during the spread of acute contagious infections indicates the possibility of these houses performing a sanitary and epidemic function, the prospects of which depend on the appropriate adjustment of the public health care system.

Chronicles of restrictions on the movement of citizens in Russian regions in March–April 2020

In Russia, immediately after the emergence of the first information about the detected coronavirus cases in Moscow and St. Petersburg, which happened in the first days of March 2020, the active departure of the population from the metropolis to country houses began. Several million people (at least 5–6) left the two Russian capitals within a month and a half: citizens who have their own country houses, and “seasonal workers” (temporary domestic migrant workers from rural areas and small towns working in the watch regime), these are also citizens of the “first” and “second” generations with parents and relatives in small towns and rural areas, and finally, those transferred to distance learning from the capital universities who came from other cities and rural areas.

Initially, the country movements of citizens were not regulated in any way. In general, pandemic measures were introduced first in Moscow: on March 14 free school attendance was allowed, and on March 21 all education was transferred to remote form, allowing families with schoolchildren to go to their dachas. The Decree of the Moscow Mayor from March 26 introduced a regime of complete self-isolation for Muscovites over 65 years old, as well as citizens suffering from chronic diseases (diabetes mellitus, bronchial asthma, cancer, as well as having suffered a heart attack or stroke). It also inspired many pensioners prior to the introduction of the ban to move to dachas in the suburbs near Moscow and other regions.

Large-scale restrictive measures in connection with the coronavirus in Russia as a whole were introduced by the President in a television address on March 28, 2020, he declared the week from March 30 to April 5 non-working with the preservation of wages.

A self-isolation regime for citizens of all ages has been introduced almost everywhere, under which it was not recommended to leave home for no good reason (except for going to a pharmacy, a grocery store, emergency visit of a doctor, walking a dog, disposing of garbage or commute to work that does not allow a remote option) (TASS 2020c).

These restrictions were extended first until 30 April, then until 11 May, but as part of the overall strategy, local authorities were able to adjust the list of measures, depending on the dynamics of the pandemic situation. As a result, the regions were divided into several groups, differing in the timing and severity of the measures.

These were the most severe in the major metropolitan centers – Moscow and Moscow Oblast (62.1% of all patients as of 10.05.2020; calculated according to (Stopcoronavirus.rf 2020)), St. Petersburg and Leningrad Oblast (4.2%).

On March 29, the Moscow Mayor and the Governor of the Moscow region by their decrees expanded the “high alert” regime, which further only intensified by the introduction of digital passes (including for trips to dachas) from April 15, a ban on visiting cemeteries and churches, limiting the number of trips for personal business, abolishing certain transportation benefits, etc.

In St. Petersburg, public transport hours were reduced, and in order to travel to dacha it was necessary to possess a package of documents for country property and not to stop anywhere on the road, except for gas stations (Window to Petersburg 2020).

In the Nizhny Novgorod, Murmansk, Sverdlovsk, Tula, Rostov, Kaluga, Ryazan, Bryansk Oblasts, the Republics of Dagestan, Tatarstan, North Ossetia-Alania, among the top 16 in terms of infection, the total share of which on 10.05.2020 was 11.9%, the restrictions are slightly less intense and can be lifted earlier than in capitals. Thus, in the Sverdlovsk Oblast

the work of shopping centers, cosmetologists, make-up artists, massage therapists is limited; the most severe restrictions are imposed in Yekaterinburg, Verkhnyaya Salda, Polevsky, Bogdanovich, Nizhny Tagil, Krasnoufimsk, where cases of coronavirus have been identified (URA.RU 2020). In Murmansk Oblast, beauty salons, hairdressers, spas, cosmetic and cosmetology salons have been allowed to work on special conditions since May 5; trips to the dacha were allowed, provided that it is located in the Murmansk Oblast and did not fall into the zone of special regimes and quarantine. When travelling, it is required to have documents confirming the rights for the object (property, rent, etc.) (Government of the Murmansk Oblast 2020).

The total share of the remaining 69 regions with identified diseases was 21.8%, which, taking into account the total population, indicates a calmer pandemic situation, less severe and less lengthy restrictions. In Buryatia, for example, enterprises of 59 types of activity got the right to work in compliance with sanitary requirements and social distancing, in the Arctic regions of Yakutia restrictions remained only for meetings, for which the number of participants should not exceed 50 people (Mail.ru 2020).

At the same time, in local foci of infectious disease, regardless of the general situation in the region, additional restrictions may be imposed up to quarantine, which, among other things, completely prohibits entry and exit to the territory, including for dacha owners. So, on May 2, 2020, the Governor of Nizhny Novgorod Oblast introduced a quarantine in the village of Pochinki (Pochinkovsky district), the city district of Vyksa, Pavlov and the working village of Tumbotino (Pavlovsky district), the city of Kulebaki and the working village of Gremyachevo, the working village of Mukhtolovo (Ardatovsky district) (Government of Nizhny Novgorod Oblast 2020). The local quarantine imposed in Vladimir Oblast in April in the Petushinsky district and the city of Kolchugino, was on May 8 joined by the villages of the Mezinovsky and Zolotkovo Gus-Khrustalny districts, where there are many Muscovite-owned dachas (ProVladimir 2020).

One of the newest means of regulating the movement of citizens both within the city and beyond has been the introduction of digital passes. In Moscow, from April 15, a system of mandatory digital passes for trips in Moscow and Moscow Oblast by public or personal transport was introduced, indicating the purpose and route of travel. The digital pass system implies that during a coronavirus pandemic, citizens cannot move around the territory of the region without a previously received QR code. On April 13, i.e. on the eve of the first day of the new system, 1.8 million digital passes were issued (TASS 2020a). The new system limited Muscovite movements for personal purposes to two days a week, including moving from the city to dachas. Moving around Moscow without a digital pass was fraught with high fines.

The Ministry of Digital Development, Communications and Mass Media of the Russian Federation developed in April a federal programme of digital passes for regions (similar to that implemented in Moscow and Moscow Oblast). In the second half of May, it was planned to connect regions of the Central Federal District and then another 14 regions (TASS 2020b).

The degree of digitalization in Russia, which is one of the highest in the world, allowed to develop and implement a digital system for regulating the movement of citizens in the shortest possible time. The basis of the system became previously developed specialized digital platforms of public services, allowing citizens to remotely register for visits to doctors in state clinics, attach children to kindergartens and schools, to pay for housing and utility services, to pay taxes, fines, to receive certificates and much more. In Moscow, the digital pass system was connected to the existing digital platform of Moscow State Services (<https://>

www.mos.ru/), and in Russia as a whole to the State Services platform (<https://www.gosuslugi.ru>).

However, the practical implementation of the new regulatory system with the application of digital travel permits in Moscow, especially in the first stage, was not very effective: on the first day digital passes were in effect on 15 April, police officers, as well as traffic police, were ordered to check the availability of digital passes for all passengers entering the metro as well as for all drivers entering Moscow. As a result, queues were formed at the entrances to the metro, in which people were forced to stand close to each other without observing the necessary distance. At the same time, there were giant traffic jams at the entrance to Moscow due to checking drivers' passes. Soon, checks at the entrance to Moscow were replaced with remote forms of control (CCTV cameras read license plates and checked them in the database of digital passes). However, many associate the subsequent sharp increase in the incidence in Moscow with these excesses.

Thus, we see a variety of approaches to the regulation of spatial flows and the provision of self-isolation regime in different regions of Russia.

Muscovites flee from the virus out of city: four waves of "coronavirus migration"

The departure of citizens from Moscow began in February 2020 – immediately after the outbreak of the coronavirus pandemic in Europe, especially after the emergence of threatening statistics on morbidity and mortality in Italy (a strong impression was caused by the widely circulated pictures of coffins in Italian cathedrals). Then the first reports of those infected with the virus in Russia began to appear (31 January in Zabaykalsky Krai, 1–2 March in Moscow, 5–6 March in St. Petersburg). Without waiting for official decisions and recommendations, many Muscovites with dachas began to move out themselves, as well as to remove elderly relatives. It is possible to distinguish several waves of deurbanization migration, a kind of "exodus from metropolises" (using the metaphor of the sociologist Pokrovsky N.E.) in connection with the coronavirus pandemic.

The very first, still relatively weak wave was marked in the second half of February, together with the emergence of information on the rise of disease and mortality from the virus in Europe. This time of intense anticipation for the beginning of the epidemic in Russia coincided with an abnormally warm end of February. The first wave affected Muscovites with well-equipped country houses (with centralized water supply, sewage and heating). Among those moving to country homes because of fear of the pandemic were mostly unemployed pensioners (identified as the most vulnerable group already in January), as well as middle-aged Muscovites with children, preschoolers and those working remotely.

The second wave of citizens leaving the city began in mid-March, when it was announced about the possibility of transferring schoolchildren to distance education by decision of parents. The main composition of this wave is pensioners (grandparents) and grand-schoolchildren who move by the decision of the family, non-working mothers with preschoolers and schoolchildren, as well as middle-aged citizens having an opportunity (by the initiative of employers) to switch to a remote mode of work.

The third – the most massive wave – was formed in the last days of March, just after the announcement on 28 March by Putin V.V. of the period from March 30 to April 5 non-working days with the preservation of wages. However, already on April 2, the president extended

days off until April 30. Many enterprises and organizations have moved employees to permanent remote operation since that time. However, in Moscow the “state of emergency” was never declared, and the measures introduced were officially called the “high alert regime”, so many businesses continued the work semi-formally.

The fourth wave was connected with the beginning of traditional Russian “May” holidays – May 1 (“Day of Workers’ Solidarity” or “Holiday of Spring and Labour”) and May 9 (“Victory Day”). The entire period from 1 to 11 May was declared by the President as non-working days.

How many Muscovites went out of town in connection with the pandemic?

Exact data on the number of citizens who left the city in connection with the coronavirus pandemic in the first two months after the outbreak of the pandemic and continue to travel to their dachas are still not available, streams of dacha dwellers, as well as many other internal population movements earlier and now remain outside fields of view of official statistics. However, some indirect data could be used that would provide at least the extent of the phenomenon. Some of them are available now, others will appear later and become the subject of special quantitative research.

We will list the main sources of information on the number of citizens leaving metropolises to out-of-town areas in connection with the coronavirus pandemic, some of which will be used by us in further discussions:

1. information on the number of existing country houses in our country (dachas, garden plots, cottages, rural houses turned into dachas) and the number of country houses both in Moscow Oblast and in Russia as a whole, as well as the extent of country migration in Russia under normal conditions;
2. operational data of the Center for Traffic Organization in Moscow about the peaks of Muscovites leaving the city due to the pandemic in April 2020;
3. reports of real estate rental and sale agencies (e.g., CIAN) about a sharp rise in requests for rent (partially for purchase) of countryside dacha real estate in March–April 2020;
4. media reports about a sharp growth in the first two weeks after the outbreak of the pandemic of the quantity of garbage in the outskirts of Moscow in dacha areas and that garbage disposal services cannot cope with the increased volumes;
5. data of state digital platforms for issuing digital passes for travelling in Moscow and other regions of Russia – via the Internet application “Mosgosuslugi” for Moscow, and “Gosuslugi STOP-coronavirus” for the rest of Russia;
6. data of preliminary sociological studies – observations, expert surveys, analysis of social networks (WhatsApp, VKontakte, Facebook, Instagram, etc.);
7. data of mobile operators on the movement of subscribers (closed data); reports of telecom operators on the increase of the Internet and mobile networks load in country zones, as well as growth of applications for new connection to high-speed Internet in dacha villages.

Estimates of the number of dachas and dacha dwellers in Russia, as well as the scale of dacha migration in the pre-coronavirus era were performed by a group of Russian social geographers, sociologists and demographers: Nefedova T.G., Treivish A.I., Pokrovsky N.E., Mahrova A.G., Averkiewa K.V., Ilyin V.I., Nikolaeva U.G. et al. (Pokrovsky and Nefedova

2014; Averkieva et al. 2016; Nefedova and Nikolaeva 2019). The specifics of Russian urbanization is the lag of the latter compared to Western countries, the sparsity of the urban network, the widespread prevalence among citizens of out-of-town landholdings – dachas, which perform not only recreational but also an agricultural production function as personal subsidiary households. Also in Russia, labour “seasonality” is widespread – temporary labour migration in the watch mode of residents of small towns and villages in metropolitan areas with regular return home.

Nefedova T.G. and Treavish A.I. made calculations of the scale of summer migration in Russia and proposed a sociogeographic typology of dachas: “near dachas”, located in suburbia at a distance from 30 to 150–250 km from the capital; “medium remote dachas” (250–300 km) and finally the “distant dachas” (300–700 km or more), generally in rural areas. According to their research, there are 14 million registered garden plots in Russia alone, whose users are at least 40 million people (taking into account the family ratio) (Averkieva et al. 2016: 300–318). However, other types of country property were also widespread in Russia: village houses in rural settlements that were specially bought or inherited from rural relatives, seasonal dacha use of rural houses in small towns, as well as not registered seasonal arrival of citizens of the first or second generation to village relatives (parents, grandparents to rural houses in summer). At the same time, dacha ownership shared by several generations turns out to be a common model for Russian families. Taking into account these types of out-of-town real estate, the number of country estates increases to 17–20 million, then accordingly the country’s summer migration covers approximately 50–60 million people (taking into account average family composition). Dachas in Moscow Oblast have more than 3 million Muscovites (Averkieva et al. 2016: 283–296).

Why is Russia leading in Europe in the number of country estates owned by townspeople? This is determined by a combination of a number of historical, economic, socio-political, socio-geographical, demographic and sociocultural reasons (Nefedova et al. 2015; Averkieva et al. 2016). Among millions of Russian dachas located in gardening non-profit associations, a significant share was received even in Soviet times by workers from enterprises for free on weekends and during the holiday season of gardening activities (famous standard “6 acres”; the size of plots, as well as the number of floors of buildings were severely limited in the USSR). Many country houses were built already in the post-Soviet period, when the purchase and sale of land was allowed, and agricultural land in the suburbs nearest from metropolitan areas began to be repurposed for cottage development.

A considerable number of second possessions of citizens are located not in special country villages, but directly in rural areas in the territories of rural settlements. These are ordinary village houses, which are either bought out by the townspeople and turned into dachas or inherited by the citizens of the first to second generations from their parents and relatives who continued to live in the village. In the latter case, rural houses usually during the lifetime of permanent rural owners, acquire the additional “dacha” function for children and grandchildren who have moved to the city but regularly visit the village in summer to “plant potatoes” and help with the household.

Not all second (third, fourth) houses are actively used by owners – there are many rarely visited and even empty dachas. However, Russians do not give up even the little-used cottage holdings, as taxes on real estate in Russia, especially countryside, in all the post-Soviet years (up to the recent time) were very low. At the time of the pandemic, these “reserves” were in demand.

Indirect evidence of a sharp increase in Muscovite departures due to the coronavirus pandemic suggests the following. Mass departure of Muscovites from the capital at the end of March was recorded by traffic organization services. Thus, according to Interfax reports dated 03.04.2020 with reference to the Center for Traffic Organization, prior to the announced non-working week in the period from 27 to 29 March (in just three days), 567 thousand cars left Moscow, and this is over 850 thousand people. (Interfax 2020a). A considerable number of Muscovites who do not own cars travelled outside the city by express trains and buses. Considering that the entire next week was declared non-working, in the following days the townspeople also continued to depart. We marked this period as the “third” exit wave, which can be considered the peak of departure from Moscow in connection with the coronavirus.

In the same period – from mid-March to mid-April – real estate sales and rental agencies (CIAN, Avito, Incom-Real Estate, etc.) reported a sharp increase in requests for country housing in various formats (from expensive cottages to unheated country houses). According to analysts of the leading operator for rent and purchase of housing CIAN, the number of views of ads for long-term rent of dachas and cottages in Moscow Oblast in the second half of March as a whole increased by 2.7 times, the peak of demand came on March 28, when the number of ad views per day turned out to be seven times higher than on the same date a year earlier (Cian 2020).

At the same time, by the beginning of April, operators for garbage removal declared a sharp increase in volumes of garbage collected in Moscow suburbs, especially in non-commercial gardening associations. In particular, the company “EcoLine-Voskresensk” reported an increase in waste in the residential sector by 11%, in the private sector of the Ramenskoye district by 33%, and in the sector of non-commercial gardening associations – immediately by 163%. (Interfax 2020c).

Preliminary sociological studies have confirmed a sharp increase in the population of “nearby” dachas, located in the capital’s suburbia (in particular, expert surveys, analysis of social networks conducted in April–May by a research group led by the sociologist Pokrovsky N.E. within the framework of the interdisciplinary “Ugric Project”).

In normal (non-quarantine) times, most dacha dwellers in Russia use country houses in summer, which is due to a number of factors – insufficient conveniences of many country houses (lack of heating, centralized water supply and sewerage), insufficient digitalization, and the concentration of jobs in the capital. However, in well-equipped suburban country villages with gas heating, water supply and sewerage, many citizens (up to 20–30%) live in country houses on a regular basis, working remotely or daily leaving for the city to work by car and returning, or they come to the cottage on weekends, increasing the population on average up to 30–45%.

Due to coronavirus, by mid-April the occupancy of households was closer to that of “summer” and was approximately 70–75%, and by the end of April–early May was approximately 80–85% (including the settlement of rarely visited households, as well as record high rent of households that were previously put up for rent for a number of years but did not find tenants). On May holidays in a number of summer settlements 90% occupancy was noted.

A significant increase in the filling of country houses with people was recorded. Judging by surveys, as well as by a two-threefold increase in the number of cars parked in countryside territories, the occupancy of households increased by at least 1.2–2 times in relation to last year norms. Many families of townspeople came to their country houses in an extended multigenerational composition (from 2–3 to 6–8 people, average – 3.5 people).

In normal non-quarantine time, family members’ stay in dacha is usually distributed over time. At the same time, all family members of different generations come to the dacha for nationwide holidays (May 1, May 9, etc.) and during the summer holidays. In general, elderly

family members – pensioners, often live at dachas throughout summer, often together with children of older preschool and school age; adult working family members come to the dachas at weekends or during the vacation period. In recent decades, an increasing number of Russians (up to 6%, according to VTsIOM surveys), instead of a long stay at the dacha preferred to visit foreign resorts (this is especially typical for young people and middle-aged people).

With the beginning of the pandemic, a relatively large number of citizens left for so-called “medium remote” and “distant” dachas, located in rural areas inside rural settlements. Long-lasting recreational migration of citizens to the countryside has in recent decades become a significant factor in the economic and social stabilization of rural communities, as well as the containment of the increasing depopulation of rural population (Pokrovsky and Nefedova 2014; Averkieva et al. 2016; Denisenko and Nikolaeva 2015; Kalabikhina and Mokrensky 2017).

In addition to dacha dwellers, temporary workers from small towns and rural areas working in watch mode began to actively return to the countryside from metropolises, the total number of which in Russia, on average, is estimated by experts from 3 to 7 million (Nefedova 2015; Averkieva et al. 2016). Due to the closure of kindergartens and schools, as well as many mass service establishments (cafes, restaurants) in mid-March, seasonal workers, guards, caretakers, waiters, cooks, etc. went on forced leave.

The peak period of return of seasonal workers to the countryside began on April 13, 2020, when, by the Decree of the Moscow Mayor (of 10.04.2020 № 42–UM), construction works in Moscow were officially suspended from 13 to 19 April, 2020 (apart from the construction of medical facilities and continuous cycle buildings). The suspension of construction in Moscow was then extended until May 11–14.

Along with the arrival of dacha dwellers in the countryside, urban relatives to villagers, as well as seasonal workers in rural areas of Russia the coronavirus began to spread relatively quickly, and in neighbouring villages both dacha dwellers and seasonal workers could be a source of infestation.

According to our estimates, between mid-March and early May at least 6–7 million people left Moscow, including dacha dwellers, as well as seasonal workers, students from non-capital cities and rural areas. These estimates are given with regard to the “pulsations” of the metropolitan population identified by social geographers in past years, in particular, the reduction of the summer composition of Moscow at weekends to 5 million (Averkieva et al. 2016; Mahrova and Babkin 2018). The dacha “coronavirus” migration also covered St. Petersburg (according to our estimates, at least 1.5 million left in March-April-May).

Given the pessimistic forecasts for further the coronavirus spread in Russia, as well as weather forecasts for summer (danger of abnormal heat), almost the entire mass of Russians with country ownership (at least 40–50 million people) will resort to optional countryside self-isolation in the summer of 2020.

Dacha deurbanization due to the coronavirus in Russia will continue in the summer of 2020

The coronavirus pandemic, as can be predicted, will force Russians to abandon foreign business, tourist trips and visits to resorts which in recent decades have become widespread form of recreation for Russian citizens.

The bulk of Muscovites with medium or high income spend only part of the summer in the country house, and the rest – in tourist trips, at resorts (Russian or foreign) or in coun-

try houses purchased abroad. Low-income Russians spend the entire summer (or vacation period) in their dachas. Russian pensioners, as well as children of preschool and school age spend most of the time in dachas. The middle generation, as well as young people, prefer to come to summer houses on weekends or for a few weeks during the holidays.

The extent of recreational mobility of Russians during the summer period in normal times is indicated, for example, by the following studies and statistics. The analytical review of the Russian Public Opinion Research Center (VTsIOM) presents research data on how Russians spent their holidays in the summer of 2019. After outdoor activities (hiking, fishing, hunting; 47%), the second place was occupied by a summer house and a garden (36%). In the summer of 2019, a third of Russians stayed at home (33%), another third – at a dacha or garden plot (27%), 8% of respondents went abroad, and 6% went to the resorts of Krasnodar Krai (VTsIOM 2019). Considering that in many small cities of Russia a significant part of households is closer in their characteristics to country houses rather than to city apartments (a detached wooden or brick house, a comparatively large plot of land used as a garden or vegetable garden), then the figures on “spending holiday at home” can partly be attributed to a country house or a semi-dacha option.

In recent decades, the cross-border mobility of Russians, including recreational, has reached high values, and its extent can be judged by statistical data published by the Association of Tour Operators of Russia on 17.02.2020 on Russian departures abroad in 2019, which were provided by the Border Service of the Federal Security Service of Russia. According to these data, in 2019 Russian citizens made 48 million trips to 176 foreign states and territories (excluding Belarus, as it does not appear in border statistics). Despite the fact that these data does not distinguish between tourist travel and trips made for other purposes, and does not take into account the repeated departures of the same citizens, in general it is possible to imagine the general scale of cross-border activity of the population, a proportion of which is traveling for recreation and tourism. The following countries lead in the outbound flow from Russia in 2019 (some of them are recognized resort centers): Turkey – 6 991 528, Abkhazia – 4 802 475, Finland – 3 962 865, Kazakhstan – 3 417 996, China – 2 606 719, Ukraine – 2 577 871, Estonia – 1 890 452, Germany – 1 426 262, Italy – 1 361 946, Thailand – 1 231 441, Poland – 1 163 784, Spain – 1 063 138, United Arab Emirates – 997 322, Cyprus – 901 051, Greece – 777 934 (Association of Tour Operators of Russia 2020).

It should be added that many citizens of the Russian Federation in the last three decades actively bought property abroad – primarily in Europe, as well as in the United States and other countries. A large proportion of these purchases covered the resort areas of Bulgaria, Montenegro, Turkey, Spain, Italy, Cyprus, Greece, France, and property purchases were made for recreational purposes (in other words, foreign country houses intended for seasonal rest were bought). At the same time, the majority of Russian residents of megacities, who bought second (third, fourth) country houses abroad, still have dachas in Russia, which is explained by the proximity of the latter to the city and the unburdensomeness of their maintenance (low taxes on countryside property).

In the context of the coronavirus pandemic, most Russians will be forced to abandon foreign tourism and recreation, visiting foreign households. There will be limited opportunities to visit Russian sanatoriums and resort areas. This will force townspeople to spend holidays in their own or rented dachas (the number of rented dachas, apparently, will rise dramatically). It is to this forecast that we are inclined, given the incoming information that in Russia the peak of the pandemic has not yet been reached, several thousand of those who have fallen ill continues to be detected in capitals and regions on a daily basis.

The departure of citizens to country houses will increase if forecasts for the hot summer of 2020 come true (Interfax 2020b). The population of Russia perfectly remembers the anomalous heat of July–August 2010, accompanied by fires and smoke in the capital and many other major cities, as well as a sharp increase in population mortality due to hyperthermia and exacerbation of associated diseases (at that time mortality in Moscow increased by 50.7% compared to the same figures of the previous year; over 40 thousand Russians died from heat and smog in August, including 9 thousand Muscovites, which is a quarter (27.4%) more than in August 2009 (Demoscope Weekly 2010).

Economic and social consequences of mass dacha migration in Russia in connection with the COVID-19 pandemic: preliminary findings

The departure of citizens to out-of-town spaces, which has become a common strategy of self-preservation behaviour of Russians in the conditions of a pandemic coronavirus, entails many heterogeneous consequences – both positive and negative.

The positive consequences of mass departure of citizens in suburbia and the countryside include the following:

1. a significant reduction in the number of social contacts in the metropolis, including the frequency of people's use of public transport, public places visits, which eventually reduces the likelihood of infection and spread of the virus;
2. reduction of negative socio-psychological and physiological impact of quarantine measures on citizens (especially children) forced to be in relatively cramped city apartments due to the introduction of the regime of self-isolation for a long period, experiencing forced sedentary lifestyle and lack of fresh air; the importance of these factors will increase with the beginning of the hot summer season, if the self-isolation regime is extended;
3. activation of the "production" function of dachas personal subsidiary households of citizens and potential growth of volumes of products produced in such farms for intra-family consumption (which can be seen as preventive measures and adaptive strategy due to the projected economic downturn, job losses and lower incomes of the bulk of Russian households);
4. stimulating domestic demand for food, household goods, as well as various services in local regional markets, including in economically depressed rural areas;
5. creation of conditions for recreation of the bulk of citizens in the summer period, which will compensate for the closure of most Russian and foreign resorts, sanatoriums, holiday homes;
6. incentives for modernization of second country houses in connection with forced prolonged stay in them (improvement of living conditions, including heating, water supply and sewerage in those houses that are deprived of it; placement of computer and other electronic and household equipment; high-speed Internet wiring, etc.);
7. the strengthening in the long-term of the trend towards suburbanization and deurbanization, including an increase in quantities of primarily and permanent residents of metropolitan areas living outside the city (given the widespread development of remote forms of employment and remote education of schoolchildren due to the coronavirus pandemic);

8. a potential increase on the part of townspeople of the volume of investments in the development of local rural industries, farms, personal subsidiary households of rural residents, investments in infrastructure and cultural institutions (museums, leisure centers) in suburbs, small towns and rural areas.

The negative consequences of the mass departure of citizens to the suburbs and to the countryside include the following:

1. contributing to a more rapid spread of the disease outside the metropolises – in suburbia, small towns and rural areas;
2. increasing the burden on the health care system in regions, small towns and rural areas which are much less prepared for the emergency of the pandemic (given the recent years large-scale “optimization” in the field of health care, including the reduction of the number of rural paramedical and obstetrical stations, inpatient hospitals, hospital beds). This may reduce the ability to provide timely and qualified medical care, thereby potentially increasing mortality from coronavirus effects;
3. provoking a sharp increase in demand in rural areas and small towns for food and household goods, which can lead to temporary food shortages, as well as higher prices for basic goods, which could have a particularly negative impact on rural households, having much lower income compared to the income of citizens from metropolitan areas.

Thus, the deurbanization strategy and centrifugal dacha migration became the dominant model of the response of the Russian population to the COVID-19 pandemic. In the first three months of the pandemic, at least 6–6.5 million inhabitants of Moscow and St. Petersburg travelled to suburbia, small towns and the countryside, resulting in both positive and negative social, economic and pandemic consequences, many of which will be not only short-term but also long-term.

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