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RURAL STUDIES

Family Farmsteads in Siberian Villages: Problems of Transformation

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Abstract—The article studies the transformation processes of personal subsidiary household plots held by the rural population of Russia during the time that followed the beginning of market reforms. Based on the critical interpretation of the data provided by the two All-Russian agricultural censuses, changes in the scale of activity, in the volume of production, and in the specialization of personal subsidiary household plots in different regions of Siberia are identified over the period 2006–2016. In order to study individual local cases, material from in-depth interviews obtained from heads and specialists of rural administrations, as well as from members of family farms in Tomsk, Tyumen, and Novosibirsk oblasts, is used. The author compares the results obtained by a quantitative analysis of the statistical data and conclusions following from a qualitative sociological study of local cases, not only from the standpoint of identifying the long-term trends but also possible information distortions of an institutional nature. As the basic hypothesis of the study, we assume the absence of a common trend for all regions characterizing the processes of the transformation of personal subsidiary household plots and the significant influence of the agrarian policy pursued by the state and local authorities, as well as the specific local factors. The conclusions drawn by the author generally confirm this hypothesis. In the quarter of a century since the start of market reforms, the sector of rural subsidiary household farming has undergone significant changes. On the one hand, its volumes have noticeably decreased, and it has lost its former leading position in the production structure. On the other hand, it has become more diverse and is represented by a spectrum from a small family garden to a mini-farm using hired labor. At the same time, in certain cases, state support can lead to a deterioration in the economic situation of family farms. Qualitative conclusions of the study can be useful for substantiating measures aimed at sustainable development of rural areas.

Keywords: personal subsidiary household plots, rural areas, market reforms, agricultural census, Siberia
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TRANSFORMATION STAGES OF PERSONAL SUBSIDIARY HOUSEHOLD PLOTS OWNED BY RURAL POPULATION

In modern Russia, there is a particular type of economic activity that can generate income even though, in the legal sense, is not an entrepreneurial activity. These are personal subsidiary household plots (PSHPs) of the population, which were legitimized by a special federal law.[1] The forerunner of the PSHP in 1935 was the collective farmyard, understood as the totality of a personal plot of land, outbuildings, and a regulated set of domestic animals that are in the personal use of members of an agricultural artel.[2] The PSHP category has long served as a euphemism to replace the ideologically unacceptable term *private farm* and reflected a vestige of the pre-Soviet era, the meaning of which should fade with time. In practice, family farmsteads of rural residents were an essential element of survival in an environment where collective farmers were paid in kind (with the products of the collective farm) instead of money at the end of the year in proportion to the accumulated labor days. Personally owned household plots not only provided rural residents with the necessary products for personal consumption but also served as a source of income, and in specific periods it was taxed. Over time, many heads of agricultural enterprises became more attentive to the needs of household farming. Additional plots of land were allocated as PSHPs, equipment was

[1] Federal Law no. 112-FZ of July 7, 2003 On Personal Subsidiary Household Plots. http://www.consultant.ru/document/cons_doc_LAW_43127/. Accessed July 15, 2019.

[2] Draft charter of an agricultural artel (approved by the Council of People's Commissars of the USSR, Central Committee of the All-Union Communist Party of Bolsheviks on February 17, 1935). http://www.libussr.ru/doc_ussr/ussr_4042.htm. Accessed May 10, 2019.

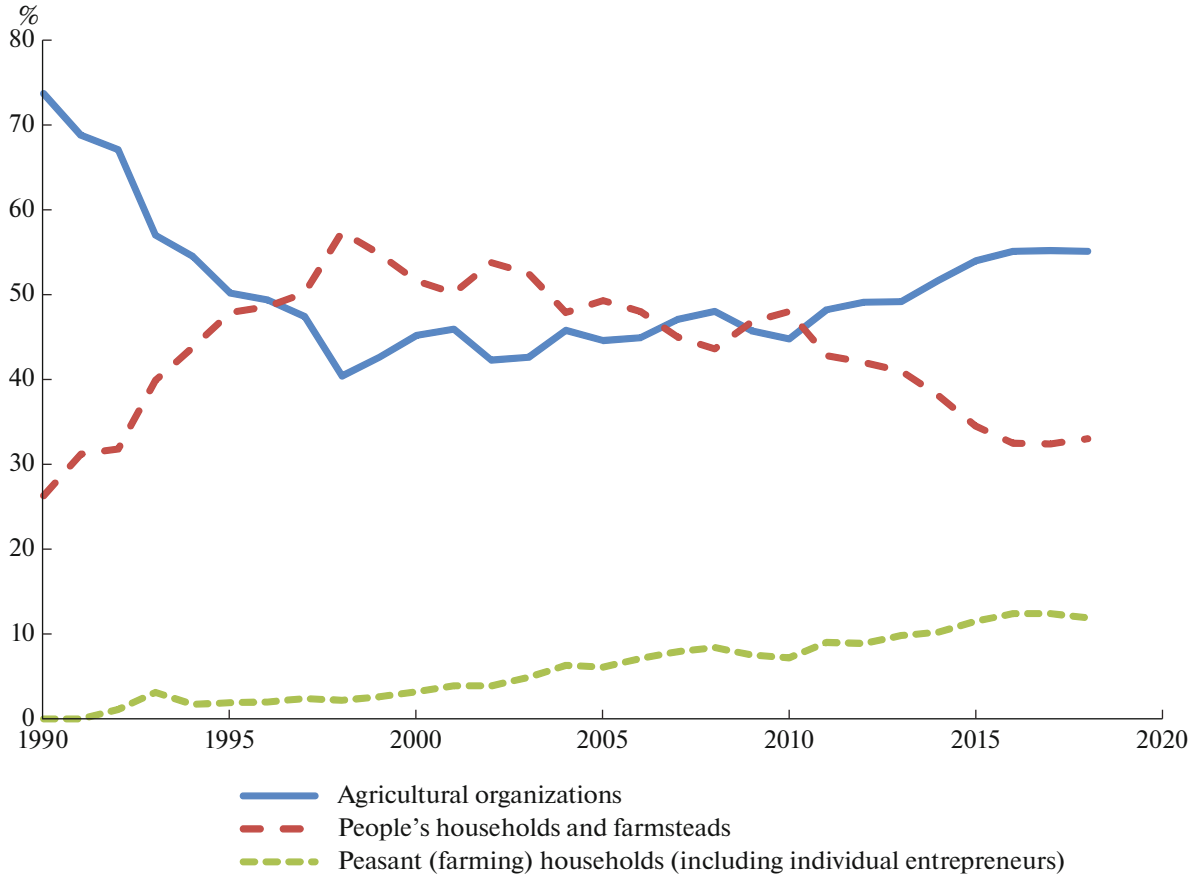

Fig. 1. The structure of agricultural products in the Russian Federation by categories of farms in actual prices, % of farms of all categories.
Source: http://www.gks.ru/free_doc/new_site/business/sx/tab-sel2.htm.

allocated (for plowing gardens and plots, planting vegetables, harvesting hay, etc.), fodder and young animals were sold at discounted prices against future remuneration, and assistance was provided with the sale of products. Through consumer cooperative outlets and the barter counter-trade that was practiced in the 1970s and 1980s, peasants exchanged their own produce for the right to purchase hard-to-obtain household appliances and other goods [5].

The market transformation of the early 1990s made serious adjustments to the significance of PSHPs for rural residents. It was at this time that the workers of the former collective and state farms were exposed to the painful repercussions from the reorganization of agricultural enterprises and privatization of property accompanied by a drop in production and delays in the payment of wages [14]. Peasants were forced to keep more livestock and poultry, as well as grow more vegetables and other agricultural products, in order not only to save themselves from hunger but also to earn money. As a result, by the mid-1990s, according to the government statistics, PSHPs began to produce half of all agricultural output, having lost the de facto status of subsidiary plots and acquired the status of the "principal breadwinner" until the mid-2010s (Fig. 1). The revival of the small-scale commodity structure and the archaization of production were interpreted by many experts as another of the numerous paradoxes of the market reforms: technically better equipped agricultural enterprises and newly formed farms were economically losing out to private farmsteads based on manual labor [6].

The inversion of the conventional beliefs, as a result of which family farmsteads and agricultural enterprises had exchanged roles [9, p. 129], can readily be explained. Due to problems with counterparties and nonpayments for shipped goods, failures in management and organization of agricultural work, lack of working capital, etc., enterprises in many cases returned to archaic remuneration in kind. Instead of money, workers received grain, flour, milk, meat, fodder, young livestock, poultry, etc.; they were provided with free technical, veterinary, and other services. Workers either sold part of the payment received in kind or used it for PSHPs. When selling PSHP products, they obtained a kind of rent by attracting, in effect, free resources, including their own labor force. Another important channel for obtaining resources for

family farming was massive theft of property (products and resources), as well as the uncontrolled use of machinery and equipment of former collective and state farms [3, 4]. Thus, a significant share of the income received by the family was formed at the cost of agricultural enterprises but ultimately it was monetized when the products of family farms were sold [12].

The symbiosis of small and large farms, which allowed the former to survive and the latter to stay afloat for a comparatively long time, even in a state of bankruptcy [10, 11], started to decline gradually in the early 2000s. The 1998 default, which led to a sharp fall in the ruble exchange rate, increased investors' interest in the domestic agrifood complex. The next stage of the transformation of PSHPs is related to the implementation of the priority national project of 2006 to 2007 "Development of the agroindustrial complex" [1], through which the state supported the entry of large-scale capital into the industry. The consolidation and modernization of production contributed to the liquidation of a significant number of agricultural enterprises and the reduction in the number of workers employed in this area. According to the results of the All-Russian Agricultural Census (ARAC) of 2006 and 2016, the number of agricultural organizations in Russia decreased by 40% from 59200 to 36100 units over 10 years, and the number of employees in them almost halved from 2613900 to 1386400.[3] The villagers not only lost their jobs but, at the same time, the opportunities for conducting PSHP farming were drastically reduced. Without the support of resources from agricultural enterprises, private farmsteads lost their main competitive advantage due to lower operating costs. In addition, the economic upturn that began in Russia provoked an increase in demand for labor resources and prompted the most active villagers to seek employment elsewhere [8]. Ultimately, the production indicators in the "popular economy" sector practically returned to the starting point of the 25-year cycle. Its share in the volume of agricultural production in 2015–2018 approached 32–33%, which is not much higher than the 1990 indicator of 26.3% (see Fig. 1).

Further, based on the mentioned agricultural censuses, we consider how rural farmsteads were transformed in Russia and the federal subjects of the Siberian Federal District (SFD) over the period from 2006 to 2016. In contrast to the annually published statistics, the census gives a more accurate idea of the structural changes in the agricultural sector in general and the relevant households. In addition, for qualitatively assessing the metamorphoses of modern rural households, their existing ecological niches, and pressing problems, we used the in-depth interviews conducted in 2017–2018 with representatives of rural administrations, PSHP owners, and heads of farms in rural areas of the Tomsk, Novosibirsk and Tyumen oblasts.

RURAL FARMSTEADS OF RUSSIA AND SIBERIA AS REFLECTED IN THE AGRICULTURAL CENSUSES

Over the decade after the first agricultural census, the number of PSHPs of citizens living in rural settlements of Russia grew from 14798500 to 15044200 units, i.e., by 1.7%. However, the decline in the share of households that produced agricultural products recorded by ARAC-2016 (from 85.3 to 77.5%, i.e., by almost 8 pp.) casts doubt on the growth in the number of PSHPs. The number of farmsteads of the rural population engaged in production decreased during this time by almost 1 mln units (from 12629100 to 11664200), which, although it happened against the background of a decrease in the number of rural residents, did not in any way correspond to the rate of this decrease (over these years, the rural population decreased from 38.4 to 37.9 mln people, or by 1.3%[4]). At the same time, the share of farms with abandoned land plots (empty buildings) increased significantly, from 9.2 to 13.7%.

The total area of agricultural land in Russia decreased by 14% over 10 years, while the area of land owned by a family and individual farms in rural areas grew by almost 40% throughout the country, which increased their share in land resources from 5 up to 7% (Table 1). In the SFD, which accounts for one-fifth of the country's land suitable for cultivation, the trend is different: the reduction in the total area of agricultural land turned out to be greater than in Russia (by 24%), with a slight increase (by 6%) in the area used by PSHPs.[5]

At the same time, Siberia's spatial diversity is noticeable in terms of the ratio between large and small agricultural producers. The first group includes regions with a significant share (more than 25%) of the family farming sector remaining in the area of agricultural land; and the second, regions where the share of PSHPs significantly decreased.

The first group includes four regions: the Republic of Altai, Republic of Buryatia, Republic of Tyva, and Zabaykalsky krai. The growth in the number of small farmsteads partly compensated the decline in production on large farms caused both by the exposure to a

[3] Results of the All-Russian Agricultural Census of 2006: 9 volumes / FSGS, Moscow: ISC Statistics of Russia, 2008, v. 1, book 1, p. 12; preliminary results of the All-Russian agricultural census of 2016: 2 volumes / FSGS, Moscow: ISC Statistics of Russia, 2017, v. 1, pp. 12, 24.

[4] Population size. https://rosstat.gov.ru/folder/12781. Accessed September 10, 2020.

[5] Hereinafter, in the indicators of the All-Russian Agricultural Census of 2006, Zabaykalsky krai is represented by Chita oblast and the Agin-Buryat Autonomous Okrug, the Irkutsk oblast includes the Ust-Orda Buryat Autonomous Okrug, and Krasnoyarsk krai is represented by the Taymyr and Evenk autonomous okrugs.

Table 1. Changes in the area and structure of agricultural land in Russia and in the regions of the SFD from 2006 to 2016

Region	Change in the area of agricultural lands, 2016/2006, %		The share of agricultural land in PSHPs in agricultural land of the region, %	
	Total	PSHPs	2006	2016
Russian Federation	**86**	**139**	**5**	**7**
SFD	**76**	**106**	**8**	**11**
Republic of Altai	93	85	34	31
Republic of Buryatia	46	144	9	28
Republic of Tyva	96	164	17	30
Republic of Khakassia	59	92	9	14
Altai krai	87	109	3	3
Zabaykalsky krai	67	96	24	35
Krasnoyarsk krai	68	58	6	5
Irkutsk oblast	61	119	9	18
Kemerovo oblast	72	59	7	6
Novosibirsk oblast	77	185	1	3
Omsk oblast	81	153	5	9
Tomsk oblast	64	105	7	12

Author's calculations based on materials of ARAC-2006 and ARAC-2016 (see results of the All-Russian Agricultural Census 2006: in 9 volumes/Federal Statistical Office, Moscow, "Statistics of Russia," 2008, v. 3, pp. 46, 48, 49; results of the All-Russian Agricultural Census 2016: in 8 volumes/Federal Statistical Office, Moscow, "Statistics of Russia," 2018, v. 3, pp. 66, 72, 73).

number of unfavourable economic, climatic, and social factors and due to changes in the agricultural policy. After dismantling the system of ongoing state subsidies for agricultural production that existed and was maintained in the Soviet Union, a significant part of the agricultural activity in Siberia became unprofitable, due to which the former collective and state farms rapidly fell into decay. Their continued existence depended on either the arrival of new owners capable of modernizing the technical and technological base of production and reorienting it to the market demand or on receiving massive government support allowing them to overcome the difficulties that they faced. Former collective and state farms that did not receive external support, as a rule, were doomed to bankruptcy and subsequent liquidation. In many cases, private farmsteads offered the only employment for rural residents who lost their jobs.

PSHPs development trends in the regions of the first group as well as in the Republic of Khakassia differ markedly from the situation in Russia and Siberia as a whole. In the territories mentioned above, the number of cattle in the farmsteads of the rural population had stabilized or even increased, while pigs and poultry livestock not decreased as significantly as in other regions (Table 2). This suggests that rural farmsteads had not only not lost their potential but had also become less dependent on large farms.

The other end of the spectrum is represented by the regions of the second group characterized by a relatively low share of PSHP land (from 3 to 9% in 2016) in rural settlements. These include the largest and most agriculturally developed Siberian regions: Altai and Krasnoyarsk krais, as well as Novosibirsk and Omsk oblasts (see Table 1). This group also includes the relatively small Kemerovo oblast, where together with Krasnoyarsk krai, we observed the most significant shrinkage in the area of land classified as PSHPs (more than 40%) over the considered decade. The low share of PSHPs in the regions of the second group can be explained by the stronger competitive position of the agricultural holdings located here and the large, rapidly growing farms, which not only drove out private farmsteads from the market but also forced hired workers to reduce their family farms. In Kuzbass, in recent years, coal companies have been taking over PSHP land, constantly increasing open-pit coal mining.

The owners and managers of large livestock complexes and grain farms are as a rule against their workers' being engaged in personal backyard farming, which negatively affects their performance in their main workplace. The large agricultural enterprises have suppressed any attempts to use the company's resources for the needs of family farms, effective security systems have been established to prevent theft and unauthorized use of equipment, and feed and young animals are not given out on account of wages or rental payments for a share of the land. The administrations of pig and poultry complexes, with the support of local authorities, on the pretext of veterinary and sanitary control requirements, prohibit their workers from

keeping pigs or poultry in their personal farmsteads. This kind of "coercion from above," in our opinion, largely explains the drastic decline in the number of pigs and poultry. It is these regions, in which large enterprises for the production of pork and poultry have appeared, that are characterized by the sharpest drop in the number of pigs (from 40 to 60%) and poultry (from 25 to 50%) in PSHPs (see Table 2). This primarily concerns Novosibirsk, Tomsk, Omsk, Kemerovo, and Irkutsk oblasts, as well as Altai krai.

According to the census, significant changes have occurred in the structure of farmland used by PSHPs over 10 years. As can be seen from Table 3, in all the Siberian regions, the share of cultivated arable land has significantly decreased. At the same time, the share of fallow lands—arable land withdrawn from circulation and not used for its intended purpose for a year or more—has increased. Increases in the area of agricultural land registered as PSHPs in Novosibirsk and Tomsk oblasts, as well as in Altai krai, were accompanied by even more massive absolute increases in the area of fallow land in this sector.

Thus, in Novosibirsk oblast, with an increase in the area of the PSHP land by 65400 ha, the area of fallow land increased by 69300 ha, and the share of the latter in the structure of farmland approached 60%. In Altai krai, the equivalent ratio was 19800 and 25900 ha; and in Tomsk oblast, 2700 and 9500 ha. Also, a high proportion of PSHP land was found in Omsk oblast (41.5%), with a significant increase in the area of agricultural land belonging to PSHPs (see Table 1). In our opinion, these data do not indicate the redistribution of farmland in favor of family farms. However, it reflects statistical manipulation, as a result of which unclaimed and uncultivated land is formally attributed to private farmsteads, and their owners not only do not in fact use them but often do not have the least idea where they are located.[6] It is no coincidence that regions with a high share of fallow land (not cultivated by the rural population) often include territories where PSHPs have noticeably lost their economic position. Thus, it can be assumed that the scale of land withdrawn from the economic turnover is more significant than implied by the census, and one of the ways to "camouflage" the statistics of land not used in production is to record it as land used in PSHPs. According to V.Ya. Uzun's estimate, "white spots of land use"—the area of uncultivated agricultural land, including land, which was not found by the census—amounted to 97.2 mln ha in 2016, or 44% of all agricultural land in the country [13].

The analysis of the census data allows us to conclude that there are two fundamentally different economic systems of the rural population, one of which has developed in eastern Siberia, in the national republics and Zabaykalsky krai; and the other, in the regions located to the southwest and representing Siberia's agrarian belt. In the former system, traditional PSHPs with the full set of elements (a large vegetable garden, livestock, pigs, poultry, sheep, etc.) remain widespread, while the latter system, against the background of prevailing private households with a noticeably reduced composition (without livestock or a large land plot), is characterized by the development of various types of commercial farms. At the same time, the observed diversity in the scale and specialization of PSHPs is far from limited to this dichotomy. Within the regions and even in individual rural areas, as our field studies show, there are numerous peculiar PSHP configurations, which should be subject to individual case studies.

Table 2. Change in the number of farm animals in PSHPs in rural settlements in Russia and in the regions of the SFD, 2016 to 2006, %

Region	Cattle	Pigs	Poultry of all kinds
Russian Federation	**74**	**45**	**77**
SFD	**80**	**58**	**66**
Republic of Altai	115	69	67
Republic of Buryatia	100	68	73
Republic of Tyva	136	51	82
Republic of Khakassia	100	90	92
Altai krai	71	52	55
Zabaykalsky krai	98	80	74
Krasnoyarsk krai	75	68	92
Irkutsk oblast	70	58	79
Kemerovo oblast	71	64	75
Novosibirsk oblast	46	38	55
Omsk oblast	65	62	70
Tomsk oblast	60	55	115

Author's calculations based on materials of ARAC-2006 and ARAC-2016 (see results of the All-Russian Agricultural Census 2006: in 9 volumes/Federal Statistical Office, Moscow, "Statistics of Russia," 2008, v. 5, book 1, pp. 10–52, 176–188; results of the All-Russian Agricultural Census 2016: in 8 volumes/Federal Statistical Office, Moscow, "Statistics of Russia," 2018, v. 5, book 1, pp. 10–52, 180–206).

PERSONAL SUBSIDIARY HOUSEHOLD PLOTS AS AN ELEMENT OF A RURAL LIFESTYLE: SUBSISTENCE CONDITIONS OF MULTIPURPOSE FARMSTEADS

In most of the Siberian villages where we carried out surveys, the metamorphoses taking place in the PSHP sector are visible to the naked eye. Village streets today are almost devoid of the familiar elements of the rural lifestyle: herds of domestic animals, being taken to pastures by shepherds in the early

[6] This concerns the share of land received by rural residents in the course of land privatization but which was not allocated in the form of specific land plots [2, 15].

Table 3. The structure of agricultural land used in PSHP in rural settlements in Russia and in the regions of the SFD as of July 1, 2006, and 2016, %

Region	2006			2016		
	Arable land	Hayfields, pastures, etc.	Fallow lands	Arable land	Hayfields, pastures, etc.	Fallow lands
Russian Federation	**30.5**	**48.1**	**21.4**	**20.8**	**47.5**	**31.7**
SFD	**11.4**	**61.9**	**26.7**	**7.5**	**65.5**	**27.0**
Republic of Altai	1.1	97.0	1.9	3.5	93.9	2.6
Republic of Buryatia	8.9	84.9	6.2	4.0	76.6	19.4
Republic of Tyva	2.2	93.4	4.4	0.7	93.1	6.2
Republic of Khakassia	7.5	90.8	1.7	5.4	86.5	8.1
Altai krai	28.3	61.5	10.2	11.4	68.4	20.2
Zabaykalsky krai	1.2	43.3	55.5	1.4	62.8	35.8
Krasnoyarsk krai	25.5	62.6	11.9	22.9	50.7	26.4
Irkutsk oblast	13.4	80.2	6.4	7.6	76.2	16.2
Kemerovo oblast	16.3	64.8	18.9	24.3	45.3	30.4
Novosibirsk oblast	38.3	43.3	18.4	15.9	25.3	58.8
Omsk oblast	40.2	40.0	19.8	21.5	37.0	41.5
Tomsk oblast	21.3	67.7	11.0	12.6	42.0	45.4

morning and brought home in the late evening. The new economic situation and the change of generations have significantly narrowed the social base for running full-fledged family farms. Young and middle-aged people are often forced to look for employment outside their permanent place of residence and therefore do not have time for household chores, keeping livestock, and cultivating a large vegetable garden. The older generation, for natural reasons, is gradually abandoning labor-intensive farming. Thus, private farmsteads are gradually returning to their historical subsidiary status.

Here is an excerpt from an interview with the head of the rural community administration in Tomsk oblast: *There are fewer and fewer PSHPs because young people are moving to find employment in the city or somewhere else. The older generation is still keeping livestock trying to hold on but their number is shrinking every year. In our largest village, people generally have 10 or 15 cows. There is not even a shepherd, we have cows, as in India, walking around the village. We are already used to it*. This opinion is shared by the representative of a municipality in one of the districts of Tomsk oblast whose official duties include monitoring state support for family farms: *I keep statistics on the population engaged in PSHP farming. Every year a hundred people give up keeping cows. The old people cannot do it any longer, and the young do not want to. Although we allocate subsidies for family farmsteads, both for technical equipment and for keeping cows, and we hold seminars*.

Some rural officials are trying to convince residents that they should not completely abandon their farmsteads because if they lose their jobs or there is a drop in their income, these backyard farms can become a safety cushion for them and the base for healthy nutrition for all family members, especially children. It is from this economic perspective, following the logic of the opportunity cost, that they compare the cost of buying groceries in the store, the cost of the family's medicine and treatment, with the cost of making homemade products. Below we give another excerpt from the interview with the head of the village administration in Tomsk oblast: *I always advise everyone to keep at least poultry. I say: What if there is a crisis tomorrow? You feed your children with various chemical products and then demand to open a pharmacy in the village. I am against the pharmacy, we need health, and you buy food in the store. Many people think that it is not profitable to produce food in PSHPs. My answer to this is to: Count how much money is spent on medicine. The benefit is that you eat food produced by yourselves.*

In the rural outback, it is possible to find a few settlements whose inhabitants, contrary to the general trend, are in no hurry to part with the traditions of their ancestors. They continue to maintain a full-fledged farmstead: they keep livestock, make dairy products, collect "gifts of nature," fish, and pick up pinecones. Using informal contacts and acquaintances, they sell the products of their labor to a stable circle of buyers who value their natural quality. Below we quote from an interview with the headmaster of a school and at the same time a village elder in Novosibirsk oblast: *Everything starts with the fishing in spring. Here you can catch a 10–15-kilogram pike and the price for them is good. Then comes the wild carp. Buyers come and pick the fish up themselves. We sell milk to summer*

residents or to those villagers who do not have cows. Although in recent years more people in the village have started buying milk in stores. We sell meat to acquaintances. This year I have four heads of cattle for slaughter, everything is already planned. Previously, people used to buy bracken (fern) but now it is no longer in demand. We collect and sell mushrooms and berries, and we make birch brooms. We have one entrepreneur who buys them here.

In village with about 100 households, there are more than 50 tractors and units of other equipment, which solves the problems with the preparation of feed for the entire village herd, with the transportation of goods, construction work, etc. In the neighborhood there is a Siberian pine grove; the village residents look after it, protect it from the barbaric collection of cones by strangers. Issues related to the grazing of animals, of which there are many in the village, are collectively resolved. The owners of the animals take turns to let the entire herd graze. Those who cannot do so hire a shepherd to cover their turn at the rate of RUB 1000 for a workday. Recently, residents of the village have started keeping horses in large numbers.

There are no proper farmers in this village, and the respondent explained this by the fact that a significant part of the life of local residents is based on the observance of common interests, and commercial farmers would inevitably split the local community. *Why are farmers disliked? Because people subconsciously understand that the community should be built on reciprocity and the solidarity of people. And farmers want to live their own way. There used to be farmers in the neighboring village, but now no one keeps cattle there. We are against all this because farmers can break our rules*. The emergence of farmers in this case is perceived as an attack on the traditional rural structure by capitalism with its clearly defined property rights and focus on profit. For local residents, the sense of freedom and open access to the surrounding natural resources, which they consider to be their own, is more important. They have no desire to somehow legalize themselves and seek support from the state. *Farming today is bondage. It's better not to register at all. Neither taxes, nor reporting.*

A similar model of a multifunctional household can be found in Tomsk oblast where we interviewed the head of one of the family backyard households. There is a lot of livestock and technical equipment in his household. Besides, the owner and his son are engaged in logging, maintain a sawmill, and earn extra money clearing roads from snow by concluding special agreements with the village administration. The household economy is highly diversified. We include excerpts from an interview with the head of the family: *We keep calves, bulls, we have a cow, horses, rams, even wild ducks; their meat is delicious. There is a small lake here, ducks come here from there, eat something and then leave. They don't fly away because they eat wheat, which makes them heavy. We have our own hayfields, more than 60 ha, but they are far away. In those places, state farms used to mow grass, sow grain, but now these are abandoned fields. We try to use them for mowing to protect them from growing birches. Where the fields are closer, farmers are working there.*

The family needs a sawmill as a safety net. *If you don't deal in timber, you can't live off agriculture.* In addition, according to the new edition of the Forest Code, only appointed procurers can cut down wood based on the issued forest use permits. The demand for firewood and sawn timber is not falling in the district since hardly any Siberian villages are supplied with gas yet. The father and son, together with hired workers, provide services mainly to social security beneficiaries—pensioners, teachers, and doctors—who are entitled to free deliveries of firewood. The beneficiaries pay for the services of the procurers with part of the sawn timber, and it is then sold.

Labor in the forest is physically difficult, it requires not only a lot of energy but also time. The procurers' acquaintance with the purchasers of firewood and lumber helps them to quickly negotiate all the conditions, if necessary, make concessions to each other, and promptly fulfill orders. *We are allocated plots where we drive on tractors for two hours one way and two hours back. It doesn't happen here that a person freely buys firewood. Locals go to the village council, where they write out a ticket, according to which 25 cubic meters of firewood is granted per household. They bring this ticket to me, we agree: either seven or ten cubic meters we supply free of charge, and I sell the rest of the firewood. This is how we collect orders for a thousand cubic meters. As a rule, the social security beneficiaries get a free carload of firewood, and they pay me for the second carload because I have to pay the guys for the work, buy diesel, clean up the wood lot, and bring the timber. Thus, I have excess cubic meters of wood left, and I sell it. Many people are willing to buy firewood, but I turn down many of them; it's hard work*.

The characters of these two stories are united not only by their adherence to the traditional peasant way of life but also by their special attitude to Nature determined by the rootedness of local communities in the ecosystem. The indigenous people monitor the condition of local forests, fields, water bodies, try to prevent their degradation even when this is not directly related to their economic interests. They jointly solve the problems of the settlement's infrastructure, help each other in difficult situations, and show solidarity. The residents of such villages find it hard to accept the innovations introduced by the authorities, aimed at tightening the regulation in protecting natural sites (transferring the forest belonging to settlements to the forest fund, limiting fishing or collecting wild plants), as well as simplifying the bidding procedures for municipal land for construction or farming, under which those who live locally and better-off citizens or

nonresidents, who have more significant chances of winning, have to compete "on equal terms."

PERSONAL SUBSIDIARY HOUSEHOLD PLOT AS A BUSINESS

The transformation of private farmsteads has recently started distinguishing several types of commercial farms from the general mass of PSHPs. In some cases, the farmsteads are engaged in the production of small batches of exclusive products, such as small family cheese dairies. They not only have to find their buyer but also to get used to the new role in their villages where not everyone is ready for their appearance and business activity. In other cases, temporally unemployed villagers take advantage of the absence of restrictions on PSHP farming to organize on their farmsteads dairy minifarms that are not registered anywhere. The specifics of running farms of different types can be disclosed using the example of the practices observed by us in Tomsk and Tyumen oblasts.

The head of a small goat farm in Tomsk oblast was prompted to start his business by health problems that prevented him from continuing to work in the construction industry. Over a period of five years, the family acquired 45 goats of the rare Saannen breed and, starting with the milk trade, eventually mastered the subtleties of cheese making, including the production of hard cheese. The family built a farm, bought a milking machine, a home pasteurizer, and then a mower to minimize the cost of purchasing feed. The farm is only operated by family members, including adult children who periodically come from the city. Farming restraints are related to the inability of the estate to keep a large number of animals and to arrange a pasture for the herd. The owner himself is forced to pasture the goats and make sure that they do not damage the neighbors' vegetable gardens. Since the village is gradually becoming popular with summer residents from the city who are not always ready to put up with the farm next door, all sorts of misunderstandings arise. Here is an excerpt from an interview with the owner of this minifarm: *In spring and autumn, when there is still no or already no grass on the pastures, I graze the animals myself and walk with the goats all the time. Otherwise, they can get into any vegetable garden. Next to us, according to the plan, there should be a livestock drive, and instead of it, people built a house and took possession of the land because no one kept animals here before. Sometimes I drive goats down the street and a car drives along. The goats run to the sides, it's hard for me to collect them. The villagers would always stop and wait until we pass, but the summer residents do not understand this and it is useless to talk to them*.

The family has established a stable sales network and does not complain about the lack of buyers, although goat's milk and cheese are at least two to three times more expensive than products made from cow's milk. The owners of the mini-farm are ready to increase their livestock further but at the same time remain within the framework of the family's (unregistered) farm. *I take milk and cheese to the city for weekend fairs. Neighbors also buy them, mainly for their children. For some time I did not appear in the city, and the residents of Tomsk immediately started to call me, and they came here to buy products. I plan to increase the farm to one hundred goats, as there is a demand for both milk and cheese. I do not plan to sell through stores, as they demand that we build a separate cheese dairy. Maybe we will do this later.*

Despite the fact that both the municipal district and oblast know about this goat farm, the owner of the farm is in no hurry to become an individual entrepreneur and a participant in various kinds of support programs. *We decided that we must live through everything ourselves, learn everything thoroughly.* He is scared by the enthusiasm of officials who advertise the import substitution policy in every possible way and offer various packages of support for small businesses. According to the terms of co-financing, a farmer can receive from RUB 2 to 20 mln from Tomsk oblast but at the same time, in two years he will be obliged to launch new business. The owner of a PSHP does not want to take unnecessary risks, as he understands that one wrong step—and an incredibly increasing debt and tax burden, an inaccurate market assessment, or a sudden drop in demand—can lead to irreversible consequences.

He drew such conclusions from the experience of his acquaintance who owned one of the largest goat farm in the oblast. *My wife and I went to see her. Now she has 180 goats and she is ready to give up. She deals only in soft cheese but recently she started having sales problems. She cannot process all the milk, she has to use it to bucket-rear goatlings. At first everything was fine, she began to expand and planned to build a milking line. But the oblast's minister of agriculture came to her and persuaded to take not one but two lines, promising support. It turned out that she invested money—she took out loans—but there were no sales*.

Other risks of expanding production, according to the respondent, arise when hired labor has to be used. Accustomed to personal responsibility, farm owners fear the incompetence of the recruited employees. In their opinion, they will not follow the technology of caring for animals or pasteurizing milk and making cheeses as carefully as the owners.

The respondent also considers it unacceptable to work on purchased raw materials since in this case the products will lose their exclusive quality: *To make first-class cheese, you need to keep your own cows or goats. I discussed this with a woman who also deals with cheese. She buys milk from someone else. It is very difficult for her to find a good supplier, despite the fact that everyone presents the required certificates. She tests it herself—the milk is not up to the mark. I tell all cheesemakers: start your own farm*.

The case of boutique farmsteads described above indicates the need for the fine-tuning (organization) of such farmsteads. They need resources for development but are in no hurry to respond to any proposals from the authorities. They have learned to work without government participation and although they are ready to accept government support but only after scrupulously weighing all the possible risks and benefits. Carefulness in raising government and borrowed funds limits the growth of this type of business but makes it sustainable.

There are interesting practices in Tyumen oblast where they implement the oblast's program of support for consumer cooperatives aimed at helping organize the marketing of PSHP products [16]. Due to marketing cooperatives with an extensive network of reception points, milk from private farmsteads is processed without interruption, and this stimulates some households to keep from 5 to 25 dairy cows on their farms. The oblast's budget pays a subsidy of RUB 3 for each liter of milk handed over to the cooperative, which raises the purchase price to an acceptable level for members of the cooperative. However, in reality, milk suppliers are constantly faced with problems that the management of cooperatives explains either by the milking season and falling prices offered by processors, or by the need to use the funds allocated by the oblast for the purchase of equipment. Since the profitability level in family farms is low, even a small decline in purchase prices can be fatal, taking into account that PSHP owners have no other outlets for their perishable product. This excerpt is from an interview with an owner of a mini-farm for 25 cows: *We sell milk through a cooperative. The price is supposedly RUB 20 per liter, but in the summer they set the price at RUB 18, promising to again pay RUB 20 from October.*

However, the drop in the milk yield in winter significantly lowers the income of the farm; during this period, it mainly covers the costs of keeping livestock. It is an especially hard period for those who have borrowed funds for development from banks. *In winter, we do not earn anything, everything goes to the farm itself. When the loans were paid off, there was no money left at all. Even now it is still difficult: you need to pay for electricity, pay for water—it is very expensive.*

As an additional direction, investments in fattening bulls are possible but they do not always pay off. According to the sanitary regulations for commercial meat production, the animals must be slaughtered at specialized facilities. However, the lack of slaughterhouses in rural areas forces the villagers to agree to hand over livestock to procurers by the live weight at minimal prices (RUB 110 per kg). As a result, the revenues are barely enough for keeping the farmstead. We give an excerpt from an interview with an owner of another mini-farm, who complained about the constantly growing costs in conditions where fluctuations in monthly income can range from RUB 30000 to 70000: *It does not pay to do anything now. Grain has to be bought and sometimes hay. Diesel fuel has also risen in price. You raise a young bull for a year, bring it to 4.5 centners and hand it over to dealers for* RUB *30000–40000. You set asid a small part of the money you earned to pay the loan, and buy fodder with the rest of the money. If there is not enough money, then the cow will not see the grain, then the milk yield will fall. In early May, I got up to 150 liters of milk per day, and now the gadflies sting the cows, the milk yield has dropped to 80–90 liters. I also give the shepherd RUB 10000 every month for my herd. Collective farms used to give outfeed for free, but now you have to buy everything. That's why I gave up pigs—I used to keep 10 pigs—it is more profitable to have cows.*

The debt burden of rural residents leaves them no choice. Your backyard is a chance to stay afloat but over time, this margin of safety may run out. *When the cooperative lowers prices, milk suppliers sigh because everything is in loans. There are no other outlets for them so they sell here. They say that we will pay off the loans, and if the price of milk does not rise, then we will slaughter the cattle and keep nothing. We sell milk with tears in our eyes as we have only this to live on. Nobody bothers themselves much with work anywhere.*

A family business, even without an official status overburdens the family, which has practically no time for rest; there are no weekends and holidays are rarely possible (only if one of a relative agrees to stand in for them). Therefore, it is not surprising that some of the owners of large farms are hatching plans for industrial cooperation with other farms: *I want to propose to everyone who supplies milk to the cooperative to build a common farm, for all of us to unite—take turns to milk and take care of the cattle. So that we have time to rest.* This can be regarded as a request for deepening cooperation, which is in short supply in the Siberian countryside [7].

THE TRANSITION FROM PERSONAL SUBSIDIARY HOUSEHOLD PLOTS TO FARMING: EFFECTS OF STATE SUPPORT

The organization of relatively large family dairy farms (20–50 dairy cows) has become a mass phenomenon in rural settlements in recent years, which is facilitated by the presence of special support programs in many regions. We encountered the positive and negative consequences of such undertakings in Tomsk oblast.

In the first case, we are talking about a household in which an entire family clan is involved: two brothers with their families and parents. At first, the brothers were engaged in timber harvesting and processing but having earned their first capital, they began to think about diversifying their business. Working in the forest ceased to be attractive because large logging companies, including Chinese ones, began to drive out small

private traders from this industry. *We are located in a 60-kilometer zone from Tomsk; you cannot cut down the forest here. It is only allowed to procure firewood or cut wood to help the victims of a fire. We work with victims of fires. We cut the wood, we bring it, we saw it. Of the 75 cubic meters that are allocated for one house, we give them 40% and we take 60% for ourselves to cover our costs.*

They were unwilling to give up their established business outright but began to look for other commercial opportunities. They submitted documents for participation in the "First Step" program for those who would like to implement an agricultural project. The business plan for growing potatoes received the support of RUB 500000, but the plan did not work out, and the potato business had to be abandoned. However, this failure did not dampen their interest, and the brothers decided to go into dairy farming and took a grant under the "New Farmer" program to build and equip a farm for 20 cows in a year-and-a-half. At the same time, they accepted an offer from one of the banks to buy out from it several rural shops, which had been pledged.

The further plans of the family business include starting their own grain production, expanding their herd, and purchasing a milking robot using the funds of the "Family Farm" program. *Under the first program, we bought an old tractor. We started growing potatoes but suffered a loss because there was no demand for them. We gave it up and decided to try to build a farm. I wrote a business plan and was granted almost RUB 2.5 mln, with which we bought a new tractor, mower, pickup press baler, and rakes. We invested our own money in the purchase of cows. The farm was also built from our own material. We will sell some of the products in our stores. We also met the owner of a large business in the city who is ready to buy 300 liters of milk from us per day for processing. True, we will not be able to manage these amounts yet but we will try. Now our responsibilities are divided as follows: I supervise the farm; my brother, the sawmill; and my wife, the shops. My father and mother are registered at my farm, as well as two farmhands—the conditions of the grant require the creation of new jobs.*

An important characteristic of this family's business is its progressive development in which the search for new opportunities is combined with the use of various sources of funding. Entrepreneurs are not afraid to enter into partnerships with the state and use the oblast's funds, complying with the requirements of the bureaucratic system (to report regularly, pay taxes, acquaint inspectors with the progress of construction). At the same time, they recently decided to stop borrowing funds. *At the very beginning, we took out loans from banks. But the situation in the village is tricky: now you have a job, tomorrow you have none. Therefore, when we reached the level of income that suits us, we decided that we would live without any loans, save something somewhere but not go into debt.*

The experience of several young single mothers led to diametrically opposite results. They tried to organize a family farm for 50 cows at once. The women were attracted by the huge, by local standards, government grants, and they agreed to comply with the conditions attached without any hesitation despite the tight deadlines for the construction and provision of livestock buildings prescribed by the terms of the contracts. The need to cofinance the project from loans taken in their own name from banks did not scare the novice entrepreneurs.

The head of the administration of the rural settlement spoke about the consequences of these single mothers being tempted state support, which, moreover, was provided under the slogan of helping families with many children. In this story, he turned out to be the one to shoulder the blame. Formally, the head was not involved in granting budget funds but when it became clear that the money had been spent and the farms had not been built, all claims were addressed to him. *We had two projects that we did not support, but the oblast's department insisted that since the money came to them from the federal budget, it had to be allocated quickly. Our residents contacted the department to each receive RUB 19 mln from the state. These are mothers with many children who wanted to build a dairy business but did not even know how much a bucket of compound feed would cost, what kind of profit they could earn. I tried to reason with them in every possible way, I told them: 'You will have to add another 40% of your money to the grant's funds. Now you are taking the loans, how will you pay them back, you have not calculated anything? The bailiffs will come to you, take away all the cows, and sell the farm under the hammer.' But they did not hear my arguments, they suffered a paralysis of consciousness. One of them asked for a separate plot to build a farm and did not pay attention to the fact that near her house electricity is cheaper, and there is some infrastructure even if insufficient. And she was given a plot in an open field. Only real calculations should be taken into account because children ultimately suffer from this approach to the distribution of budgetary funds. Who will help these families recover their losses? It turns out that the state is playing the wrong games with people!*

The transition of a family household plot to a full-fledged business requires not so many financial injections as a radical change in the economic thinking of newly announced entrepreneurs. Mastering business-planning skills should be combined with practical steps aimed at developing all the elements of production and sales of products, as well as gaining independence and responsibility. *If there is no sales capacity for a farm, no matter how much money you invest, nothing will come out of it. There were such farms in our locality. We wanted to help them—we gave them a million or two, and after a year or two, we looked, and there was nothing there. If a man is not suited for this business, it's like talking to a brick wall.* Excessive state tutelage can plant seeds of infantilism in the minds of future entre-

preneurs. The main criterion for success is the market, which is not always immediately recognized by those who until recently had a permanent job, and used PSHPs for the needs of their family and for the sale of surplus goods.

CONCLUSIONS

In the quarter of a century since the beginning of market reforms, the sector of rural farmsteads has undergone significant changes. On the one hand, it has noticeably shrunk in volume and has lost its former leading position in the structure of production. On the other hand, it has become more diverse and is now represented by a spectrum ranging from a small family vegetable garden to a mini-farm with hired labor.

The traditional approach within the naturalness/marketability dilemma no longer fully characterizes this area of employment. It is more accurate to talk about the presence of different models of family management, the preference of which in time and space is determined by many factors, and above all by the architecture of the local markets of land and jobs, sales opportunities, and the demographic parameters of families. In a number of Siberian regions, PSHPs have seriously pushed out other economic structures,[7] their owners learned to do without external support (be it an agricultural enterprise or the state) and formal registration, and they turned out to be more stable and competitive than enterprises with a legal status. The success of PSHPs, in this case, is largely related to the effects of the self-organization and diversification of the economic activities of household members, with their relative freedom in the use of inputs and choice of lifestyle. In those cases where large enterprises (including agricultural holdings) win the competition for the resources of the territory, the possibilities for the mass management of family farms shrink significantly. At the same time, boutique type rural farmsteads appear, supplying high-value products to the market in small batches.

Experts usually criticize the state for seeking to provide financial support, first of all, to big business, depriving representatives of small forms of its attention. However, as our research has shown, in some cases, the support granted to heads of family farms who want to quickly and without sufficient competence move from a small backyard farm to large competitive commercial production can harm their economic situation. The family farmstead today operates in a real economic environment and therefore, just as much as a large enterprise, needs development strategies and reliable distribution channels. The future of a significant part of rural settlements and the possibility of sustainable rural development largely depend on whether the state can help rather than harm small rural producers today by developing differentiated measures of smart regulation for different types of farms.

[7] According to the data for 2018, which were adjusted taking into account the results of ARAC-2016, in the Republic of Altai, Republic of Tyva, Republic of Khakassia, as well as in the Republic of Buryatia and Zabaykalsky krai that were until recently part of the Siberian Federal District, the share of subsidiary households in agricultural production varied from 56 to 75%. http://www.gks.ru/free_doc/new_site/business/sx/tabsel2.htm. Accessed June 15, 2019.

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CONFLICT OF INTEREST

The author declares that she has no conflict of interest.

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