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The Development of Agriculture in the Siberian Communities of Russia

Abstract

Having many years' experience in rural studies, the authors propose their own understanding of the Siberian communities' future assuming the multifunctional character of rural communities and multiplicity in the rural economy and way of life as well as considering an objective to develop human resources as a priority. Three correlated issues are under study: is a rural territory homogeneous as a subject for strategic planning, what is the object for strategic planning in rural communities and should the paradigm of strategic development be inevitably changed from a medium-range perspective to a long-range one?

Keywords: strategy of development, rural communities, rural economy, new paradigm.

Results of the Postsoviet Transformations in the Russian Agriculture

For social systems to prosper in the ever-changing world of today, they should be open to innovation, able to adapt to socio-economic, political and technological change and make sound predictions about the future. Discussing the prospects of the Russian agricultural and food sector and the rural development in general is important because the demand and price of food are going up in the context of the growing population and limited crop area (land, water, energy or fertilisers) in most parts of the world.

The medium-term trends of rural development in Russia are set by the country's agricultural policy and global challenges stemming mainly from the world financial and economic crisis. In the long term, ingenious non-traditional approaches to rural development will be required to make a radical change in the Russian rural sector.

This paper presents a vision of the development prospects of Russian rural areas based on the authors' long experience in rural studies. The concepts and attitudes underlying this vision are understanding rural areas as multifunctional territories with a mixed multi-profile economy and treatment of human development as a priority.

The 1990s economic reform proposed radical transformation in the agricultural sector, including the reorganisation of *kolkhozes* and *sovkhoses*, land reform and development of the private sector of the rural economy, to revitalise social life and encourage economic initiative among rural people. The workers of *kolkhozes* and *sovkhoses* were given the right to choose how to manage their enterprises and were free to leave collective farming organisations if they so wished. Agricultural workers and other categories in the rural population were entitled to shares in collective land and other property, which gave them the start-up capital to begin their own businesses either cooperatively or individually. The reform resulted in the institutionalisation of new economic entities to serve as a basis for a mixed rural economy.

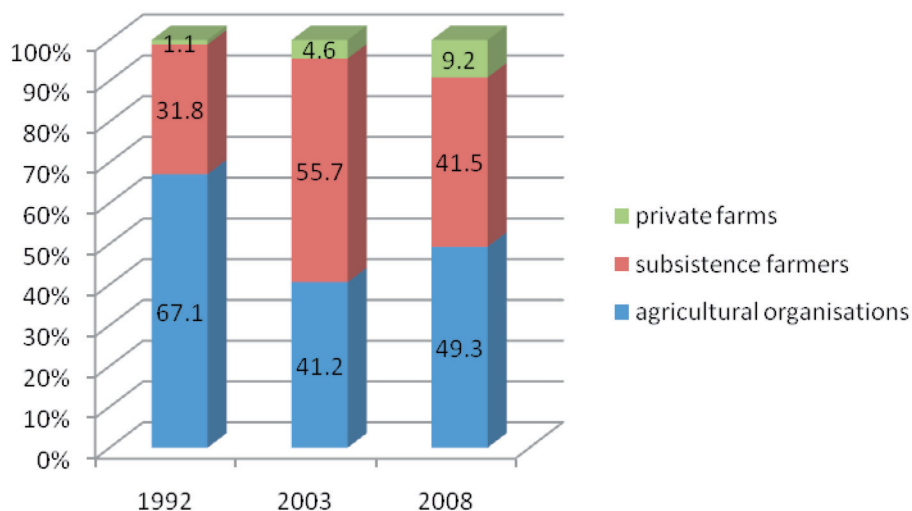
The purpose of these measures was to facilitate free competition between producers on the agricultural market. The variety of economic forms was supposed to help the rural sector capitalise on the benefits of both big and small businesses, combining the possibilities of a large agricultural enterprise with individual initiative. The radical change in property patterns was intended to ensure redistribution of land and other resources of production to effective owners and create conditions for the development of the private sector of the rural economy, agricultural services and social welfare facilities. The reform removed the administrative barriers for the development of individual subsistence farming (smallholdings). Relying on the "invisible hand" of the market, the government cut agricultural subsidies. In 1999, they were 0.17% of GDP versus 0.52% in 1995 and 8.8% in 1990 (Rastyannikov and Deryugina 2004).

It might seem that at the beginning of the reform the institutional and legal framework for the fair and efficient development of all economic forms in the rural sector was already in place. However, the outcomes of the 1990s transformations proved to be unexpected and generally paradoxical: the expansion of small commodity production, ineffective "capitalisation" of the rural economy, loss of motivation, impoverishment of the rural population and degradation of the social sector in the countryside (Kalugina, 2001). Domestic agricultural production fell so sharply in that period that it raised the question of food security.

In the next decade, agricultural law was aimed at resolving the problems related to property rights (primarily, in land), improving the regulations on private farming and use of smallholdings, stimulating consumer cooperation in the rural sector, improving the terms of credit for agricultural producers and organising production insurance. Of course, these measures have had a positive effect; however, the crisis in the industry has not as yet been overcome.

The changes in the product structure by type of agricultural producer show that private farming has not become the prevailing type of economic entity in Russian rural areas although the share of farms in the production of some goods has become visible. Farms currently produce over 20% of grain, 11% of sugar beet, about 29% of sunflower seeds and 23% of wool (Fig. 1).

Figure 1. The product structure of the Russian agricultural sector by producer type



Source: Rossiya v tsifrakh. 2009: Krat. stat. sb. (Russia in Figures. 2009: Brief Stat. Bull.), Moscow: Rosstat, 2009, p. 237.

The production and profitability collapse of the reorganised agricultural enterprises of the 1990s transformed into some stabilisation in the mid-2000s and a growth at the end of the observation period, although, in general, the sector of agricultural organisations has lost its position.

As far as subsistence farmers are concerned, the expansion of this sector in the transformation period has not been a free choice of the rural population.

For most rural communities, subsistence farming was the only way of surviving in the difficult period of reform. The stabilisation of the country's economy and agriculture, which began in the mid-2000s, was accompanied by a decrease in production by smallholdings. If, in the 1990s, the growth rate of production in subsistence farming sector was 3–8% per year, in the middle of the next decade, it was 1–2% (Rossiya v tsifrakh 2008: p. 235). The federal law on individual subsistence farming passed on July 7, 2003 declared these agricultural producers to be non-entrepreneurial entities; according to this law, small subsistence farmers can get the same kind of government support as big and medium agricultural enterprises.

In 2008 – the year with the best results in the last decade – agricultural production in Russia proved to be 20% lower in comparative terms than in 1990. If in 1990 the share of agriculture in GDP was 16%, in 2007–2008 it was 4%. According to the World Bank report, in 2003–2005, labour productivity in the agricultural sector calculated as value added per worker was on average \$2037 in Russia versus \$23 000 in the United States, \$20 000 in Canada, and \$14 000 in Germany (Sychev 2009: p. 55). In other words, labour productivity in the agricultural sector in Russia proved to be 7–10 times lower than in developed countries, while in the late 1980s, this ratio was 1:4.

Food imports in Russia grew during the whole period under study. At the end of the 2000s, the share of imports in the total food resources of Russia was on average 36%, which was 10–15% greater than the food security threshold. In some product markets, Russian producers cannot compete with suppliers of foreign food products not only because of lower performance and productivity, but also unequal competitive conditions. The foods that are imported into Russia are largely subsidised agricultural products. A part of their production costs is compensated from the budgets of the importing countries. In 2009, the share of imported foods fell noticeably due to the financial crisis.

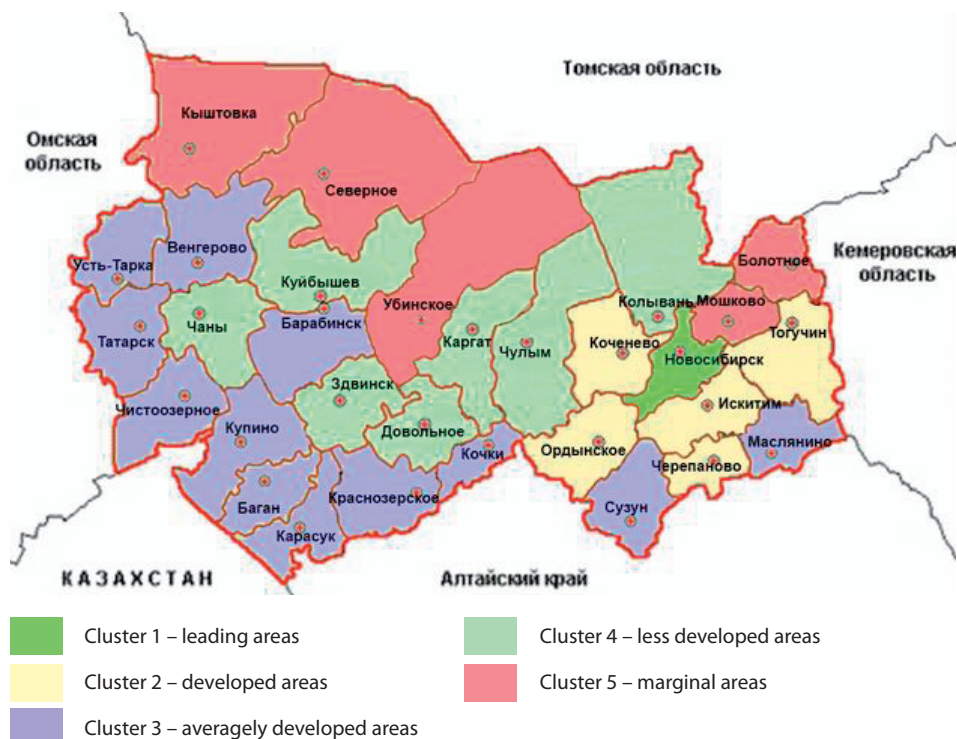
The lack of a systematic approach, coordination or any coherent concept for the development of the domestic agro-industrial complex have shaped a specific pattern of rural development with the following distinct features: mixed economic and technological patterns; the path and rate at which rural areas are moving in the space-time reference frame are uneven and uncoordinated; a high share of informal and shadow economy; deep transformation of the labour market; backwardness; unpreparedness and lack of response of the social environment to rapid social-economic change and innovation-based development; and lack of working tools to coordinate the interests of the key stakeholders of rural development (Kalugina 2010).

These conclusions served as a point of departure to devise a differential policy of socio-economic development of rural areas underlying the concept of rural development of a large region of Russia (the Novosibirsk oblast) for the period to 2025.

Rural Areas and Strategic Planning

To test the hypothesis whether the rural area is a non-homogeneous object in terms of strategic planning, we use the case of the Novosibirsk oblast to conduct a typological analysis of the socio-economic status of local rural areas. The source indicators used to group the areas show their share in the total area of the oblast, its population, agricultural and industrial production, efficiency and conditions of agricultural enterprises.

Figure 2. Location of the selected clusters on the territory of the Novosibirsk oblast



A hierarchical cluster analysis based on standardised variables allows us to specify 5 territorial clusters whose geographical location is presented in Fig. 2. A list of the source indicators and their average values for the selected clusters are given in Table 1.

Table 1. Average development indicators of the rural areas of the Novosibirsk oblast in the selected clusters

Index	Cluster				
	I	II	III	IV	V
Number of areas in the cluster	1	5	12	7	5
Share of the cluster in the total area of the oblast [%]	1.6	2.6	2.6	3.9	5.2
Share of the cluster in the resident population of the oblast [%]	4.3	2.0	1.0	0.9	0.9
Share of the cluster in agricultural production [%]	11.7	5.4	2.8	2.2	1.7
Share of the cluster in industrial production [%]	4.2	1.2	0.2	0.1	0.3
Average monthly wage in agriculture, rub.	4428	2643	1565	1436	1223
Agricultural output of all the types of agricultural producers, million rub. per year	2146	1392	765	602	410
Share of agricultural enterprises in the output [%]	41.0	51.2	58.7	51.6	33.2
Share of profitable producers in 2004 [%]	82.0	74.4	81.3	52.4	40.6
Profits per producer, thousand rub.	4823	8639	4504	3992	1554
Share of producers with good prospects* [%]	55.0	47.8	62.5	22.6	25.4
Number of private farms	138	375	106	58	41
Soil bonitet (score)	29.63	21.75	17.53	17.90	16.44
Dairy production per 100 hectares of feed area, dt	409	217	152	97	96
Beef production per 100 hectares of feed area, dt	22.2	12.2	11.4	7.2	7.0
Migration gain/outflow in 2004, persons	+1514	+150	-134	-77	-112

* Expert assessments of the Institute of Economics of the Siberian Branch of the Russian Academy of Agricultural Sciences.

Source: (Osnovnye pokazateli 2004; Sel'skoe khozyaistvo 2003).

- The **first** (special) cluster is located near the *oblast* centre and forms a large territorial agglomeration with the latter. It holds a leading position among other areas of the *oblast*.
- The **second** cluster comprises the 5 most developed areas located in suburbia or near railroads/highways.
- The **third** cluster includes 12 areas located predominantly in the steppe zone with a harsh continental climate; these areas cultivate durum wheat and industrial crops and have sustainable beef and dairy cattle production. The areas in this cluster have average indicators of development.
- The **fourth** cluster includes 7 areas with relatively favourable climatic and natural conditions whose “specialisation” is dairy cattle breeding. In terms of their socio-economic indices, they are between Clusters 3 and 5.
- The **fifth** cluster is formed by the five least developed (marginal) areas located in three different climatic zones with low soil quality, scarce population given the largest share in the *oblast*’s territory, low agricultural efficiency, decreasing role of big and medium enterprises and a weak farming sector. Agricultural production in these marginal areas is concentrated on smallholdings.

The data show that the main factors of cluster differentiation in terms of socio-economic development are geographical position, i.e. proximity to the metropolis and, thus, to the sales markets, fertility of the agricultural lands, climatic and natural conditions.

The wages in agriculture are also strongly differentiated across the clusters: the swing amplitude is 3205 rubles. On the one hand, low wages are a consequence of low performance; on the other, its cause. Moreover, underpayment of the workforce is a strong “push” factor. The resulting indicator of living conditions in the cluster is migration gain or outflow, which shows that the rural population is moving from disadvantaged to more developed areas.

Rural Development in the Perspective of Modern Concepts

Bicanic’s Concept on Turning Points in the Development of the Rural Economy

This concept proposed by the Yugoslav economist Rudolf Bicanic (Bicanic 1972) postulates that each of the three standard factors of production (labour, land and capital) goes through three stages in its historical development.

At the first stage, employment in agriculture is growing in the context of prevailing subsistence farming aimed at product maximisation. Production is completely dependent on the availability of land and its natural fertility. Capital is either scarce or absent. Natural factors and risks play a major role at this stage; the economy depends on the rural community's labour capacity.

At the second stage, agricultural employment stops growing in absolute terms, and the economy makes a transition to commodity production (production for the market) and maximisation of sales revenues. The best lands are overexploited; the size of farm holdings goes down during the process of urbanisation; and marginal lands are withdrawn from use. The capital intensity of agriculture soars while the rate of return on investment becomes on a par with other industries, which stimulates the inflow of investment from other sectors. Commercial factors play the main role at this stage.

At the third stage, employment in agriculture falls sharply; the priority is income per person employed. Farming practices become more intensive; inputs of capital are substituted for natural fertility through farming equipment and technologies, fertilisers, soil improvement, etc. Land is no longer a key factor of production; now, it is just an ordinary good. The agricultural industry is saturated with capital; there may even be restriction on capital inputs. The focus shifts to financial and innovation factors.

According to specialists, the first stage was the longest in Russia. The Soviet Union only managed to overcome it in the late 1950s–early 1960s, when the government took a decision to heavily increase the financing of the agro-industrial complex. However, the *kolkhozes* and *sovkhozes* did not become commercial enterprises, so agriculture did not move to the second stage in Bicanic's classification. Moreover, the land withdrawal typical of the second stage was extremely slow in Russia; inefficient producers on low fertility lands received government support during a very long period.

Russia made some transition from the second to the third stage at the end of the 1990s crisis, when interest grew in some of the strongest agricultural enterprises and most fertile lands as investment-attractive areas. However, the 1990s crisis forced the rural population to return to subsistence farming, which, in fact, became the largest agricultural sector; thus, a large part of the rural economy was pushed back to the first stage.

According to specialists, Russia has a specific pattern of rural development when different parts of this huge country go through stages of rural development unevenly and at different times. Thus, different types of rural economy can

even be observed within one region of the country (Nefedova 2003; Gritsai, Ioffe, et al. 1991).

The typology of the rural areas of the Novosibirsk *oblast* proves this statement. If we assess the rural development of the clusters from the standpoint of this theory, the majority of rural areas (Clusters 3 and 5) are likely to be in transition from the first to the second stage. Cluster 5, which comprises the most disadvantaged rural areas, is still in the first stage; Clusters 1 and 2, which cover the most well-off areas, are in the second stage. Only a few pioneering enterprises are observed to have some signs of transition from the second to the third stage.

Nefedova's Geographical Concept of Rural Evolution

According to this concept (Nefedova 2003), rural evolution goes through five stages consistent with the urbanisation process in the rural area.

- Stage 1, or the *natural stage*, is the situation when agricultural production, settlements and lifestyles are integrated into nature. Subsistence farming prevails, and its productivity depends on natural conditions. This phase is characterised by the diversity and autonomy of natural-ethnic rural areas.
- Stage 2, or the *early urban/natural-national stage* is the period when urbanisation stimulates an outflow of the rural population but rural communities are still numerous because of a high natural increase. However, the differentiation and specialisation of land use are already in progress although the economic results are still largely dependent on the natural environment. Individual farmers play an important role in the survival of the rural community but production in this sector has a low degree of differentiation.
- Stage 3, or *middle urban stage*, is characterised by a clear borderline between areas with favourable (south) and unfavourable (north) climatic and natural conditions for agriculture. Nature and capital are mutually complementary factors. At this stage, agricultural production and settlements become concentrated and polarised; the rural population and viable production move closer to the urban areas.
- Stage 4, or *late urban stage*, is characterised by increased differentiation between zones. Capital substitutes for labour, and there is no need for rural population to grow.
- Stage 5, or *non-natural (ecological) stage*: rural areas stop being sites of agricultural production and transform into recreational or eco-biotechnological areas.

According to the author of the concept, Russia as a whole is currently going through the third stage of evolution, but some regions, e.g. some localities in the Moscow region, are already in the next stage.

Analysis shows that the rural development of the Novosibirsk *oblast* can be best described as the middle urban stage in terms of Nefedova's model. It is also characterised by zonal differentiation of territorial development and concentration of population and production near the metropolis.

Sustainable Development

In the perspective of this concept, the rural economy goes through several stages that have a social, economic or environmental orientation. In the historical development of productive forces, the agricultural sector solves these three problems consecutively. The first problem to deal with is hunger. The countries with socially-oriented agriculture are in this stage. The next problem is the low living standard of those working in agriculture; this is the goal of countries that are in the stage of economically-oriented agriculture. Finally, some countries begin to think about minimisation of environmental damage caused by agricultural activities. These countries are in the environmentally-oriented stage.

Analysis of the situation in the Novosibirsk *oblast* shows that, in the reform period, when the Russian government scaled down its support of the agricultural sector, some "excessive" lands were withdrawn from use, agricultural production and the processing of agricultural products proved most successful in the suburban area. The share of the periphery in agricultural production fell and it became hard for the local authorities to combat the desolation and liquidation of agricultural organisations, including local producers of dairy and meat products who became uncompetitive in the new market conditions. In these conditions, it was impossible to maintain the existing profile of agricultural production characterised by the low product specialisation of the enterprises operating in areas with different climatic and natural conditions. The consequences were expansion of non-cultivated lands and downsizing of the cattle herd, since dairy and meat production became unprofitable.

It can be said that rural development in the suburban areas and in the periphery are moving in different directions. In the suburban areas, the surviving collective agricultural production organisations and farmers who managed to develop their business got a more or less stable sales market and captured the interest of processing companies and consumers. As a result, they managed to

attract investment and upgrade their equipment and technologies. However, in the periphery, the producers face a contracted sales market as a result of the deterioration of the local agricultural product processing sites. The middlemen are imposing ever harsher terms, and there are practically no opportunities for a profitable agricultural business. Therefore, the rural population in the peripheral areas has been increasingly engaged in subsistence farming.

A large share of production within the subsistence farming sector typical of all the clusters in the Novosibirsk *oblast* shows that the local rural economy is dominated by the social orientation, i.e. agricultural industry helps people survive but does not solve the problem of their living standard. In its turn, the low profitability of agricultural enterprises, which does not provide even for simple reproduction, does not let the companies move to the stage of environmentally-oriented agriculture.

In general, from the standpoint of modern concepts, Russia has a specific pattern of rural economy development: different parts of this huge country go through the evolution stages unevenly and at different times; different stages can be observed even within one and the same *oblast* of the country.

The typology of the rural areas in the Novosibirsk *oblast* confirms this idea; therefore, it is necessary to take a differential approach to the strategic development of different clusters, since they are evolving along different paths, located at different points in the space-time reference frame and represent, in fact, different social worlds.

Another conclusion from the analysis of the modern concepts is the correlation between the development of the rural economy, rural areas and rural population. This is reflected, in part, in the concept of ***Sustainable Rural Livelihood***, according to which rural communities make an integrated use of the five main resources-natural, technical, financial, social and human. The core of this system is the villager with his/her needs and interests. The main tasks of sustainable rural livelihood are protection of the rural people's property rights, improvement of their competence in agricultural production, improvement of their access to financial resources (micro-crediting schemes) and services, development of cooperation, development of rural communities, local governance and non-agricultural businesses.

The intertwining, interdependence and significance of social, economic and natural factors in the development of rural areas call for an integrated approach in solving strategic tasks. Hence, the strategic planning of rural areas should target rural development as an integral body of three main parts: development of the rural economy, rural areas and human development.

Outlines of the Rural Development Concept in Russia

The medium-term trends of rural development are largely determined by the current agricultural policy and the government's attempt to improve the situation by means of national projects. However, the lack of a systematic approach, coordination and any coherent concept for the development of the domestic agro-industrial complex do not inspire optimism although the mere fact that the development of the agro-industrial complex has been made a priority is already an achievement. In a more long-term period, it will require ingenious non-traditional approaches to rural development to make a radical change in the Russian rural sector.

Transition to the market and weakening of the government's participation in solving socio-economic tasks dictate the need in new sources of rural development. Therefore, it is necessary to change the whole paradigm of rural development in the long term.

The new paradigm of rural development suggests, first of all, retargeting-transition from state paternalism to self-development based on internal resources and equal partnership between the government, businesses and the population.

This paradigm is within the global mainstream trends. Globalisation and openness of national economies increase the competition for sales markets and consumer requirements to product quality; economic communities have to impose quotas on some types of products and reduce the area of cultivated land. Government grants and subsidies to agricultural producers, which are still high in many countries, much higher than in Russia, show a declining trend. In these conditions, it is important to look for additional sources of rural development.

One such additional source of development is diversification of the rural economy. The data on developed countries show a growth in the share of farmers engaged in non-agricultural business activities. For example, in the United Kingdom, the share of such farmers is almost 50% (Franks 2007, p. 213). In the United States, the majority of small farms are owned by countrymen whose principal source of income is non-farming activity (Protopopov 2007, p. 101). According to the data of the all-Russian agricultural census in 2006, 69% of agricultural organisations, about 50% of farms and 67% of sole traders were engaged in agricultural activities. In other words, diversification of economic activities, whose importance has been repeatedly emphasised,

is currently in progress in our country and concerns all the main groups of producers in the agricultural sector (Chepurnykh, Novoselov, Merzlov, et al., 2006, pp. 137-147).

The strategic target of rural development within the new paradigm is a qualitative breakthrough, increase in the standard and quality of life of the population and sustainable development of rural areas.

The original postulates of the concept are: poly-functionality of the rural sector; multi-profile character of the rural economy; mixed character of agricultural production; conservation of non-urban lifestyles.

The rural sector has been traditionally regarded as a supplier of agricultural products for the country's economy and urban population, and the rural population, as the agricultural producer. However, apart from production, the rural sector has a number of other important socio-economic functions which include recreation, social control over the territory and reproduction of population (*Metodologiya i metodika* 1980).

The recreational function is the improvement of the health status of the urban and rural population through natural recreational resources (mountain and forest landscapes, seaside, rivers, mineral springs, healing mud, etc.). The majority of health resorts, out-of-town hospitals, recreation and sports camps for children, hobby farming, gardening communities and tourist camps are located in the countryside. Rural settlements are, without doubt, the main provider of recreational opportunities.

The second social function of rural settlements is relatively even occupation, economic development and social control over the non-urban territories of the country. The rural population is responsible for the development and maintenance of farm land, forests, lakes and other natural resources and for law enforcement in the countryside. The rural population also plays a big part in biodiversity conservation, the struggle against soil degradation, communication and conservation of traditional knowledge and land use methods.

When a society loses its rural settlements, it loses social control over its territory, which is a threat to the country's territorial integrity, especially in a situation when adjacent countries have a deficit of land and natural resources along with high population density. This also results in a sharp contraction of the available recreational resources, adding to the already adverse demographic situation.

The reproductive function of rural settlements is not confined to the quantitative reproduction of the rural population; it also includes the transfer

of knowledge and skills of nature management and agricultural work, rural lifestyles, traditional norms and values.

The targets of rural development should be based on the understanding that the rural sector should perform all three functions. Note that the role and weight of individual functions may change radically with time. In the long term, the main functions of the rural sector should not be limited to agricultural production, which is, of course, important for the country's food security, but include other production activities. This concerns, first of all, reanimation of the social and production infrastructure of rural areas, development of agricultural product processing, revival of vernacular arts, involvement of various recreational resources into the rural economy, and development of industrial production sites based on the use of local natural resources and raw materials. In other words, the idea is to diversify the rural economy. No less important is the restoration of the production of traditional agricultural plants, which was heavily cut in the Soviet period because of the labour division between the USSR republics. For example, in the past flax cultivation was typical of Siberian agriculture.

It is necessary to emphasise the importance of conserving non-urban lifestyles in rural areas. This would serve as an additional factor attracting not only tourists and holiday-makers but also urban people who prefer a quiet and settled life. Nowadays, developed countries and Russia demonstrate a new type of settlement-suburban satellite settlements in the neighbourhood of metropolises, which transform into dormitory districts and recreational areas for well-off people who are ready to invest in the construction of their own country houses, villas, etc. These settlements will gradually develop a specific infrastructure providing supplies and services to urban people.

However, these trends do not render it unnecessary to develop and rehabilitate rural areas according to modern standards. It is only a combination of rural lifestyle with modern level of services and infrastructure that would ensure a stable influx of the urban population to the country for recreation, tourism or medical treatment. The abandonment of the monoprofile industry pattern would facilitate employment of the working population and make rural settlements more attractive as places of permanent residence.

One of the few positive results of the agricultural reforms in Russia is the creation of a mixed rural economy through institutionalisation of new economic forms of production. The diversity of economic forms encourages free competition of producers in the agricultural market, provides for the most rational use of land, human and technical resources of the industry, and helps

one capitalise on the benefits of both big and small businesses, combining the possibilities of a large agricultural enterprise with individual initiative. It is the mixed pattern, not hypertrophied development of only one economic form, let it be small private farms or large agro-industrial holdings, that will ensure the sustainable development of the rural sector in Russia.

The orientation on small forms as proposed, for example, by the representatives of *Opora Rossii*, the all-Russian civic organisation providing support for small business, and some scholars in the field of rural studies (Uzun 2007) is not only useless but even harmful for the country. This policy would conserve small commodity production and, hence, low profitability of farming and poverty of the rural population. The latter, including children and elderly people, would be doomed to hard physical unproductive and underpaid labour. World practices have shown large specialised production sites to be highly efficient. Why go against the mainstream? Why look for a “special” Russian way? The upsurge of production in smallholdings in the reform period was not the result of a free choice of the rural people; they were forced to engage in subsistence farming in order to survive when collective farming institutions were being destroyed. Thus, the data of a longitudinal survey performed in 1975–2005 by the Institute of Economics and Industrial Engineering of the Siberian Branch of the Russian Academy of Sciences in the rural areas of the Novosibirsk *oblast* show that 50 to 70% of rural respondents thought that they were forced to be engaged in subsistence farming. In the period from 1999 to 2004, when the socio-economic situation had somewhat stabilised, the share of respondents who intended to reduce their smallholdings or abandon them completely grew from 5 to 11% and from 2 to 16% respectively, and the share of those intending to expand their subsistence farming activities fell from 34 to 26% (Artemov and Novokhatskaya 2006: p. 220).

In our view, returning to small commodity production would stop the time and turn back the clock in this geographical location. In other words, this would be a space-time reversion. This conclusion is in line with Hagerstrand’s time geography, Janelle’s time-space convergence, and Giddens’s theory of the structuring of social relations across time and space (Giddens 1984). These concepts lead to the conclusion that social design projects should consider the specific features and factors underlying the social system operation in time and space and not reduce time to the measurable calendar time. Proceeding from these concepts, we can assume that acceleration or deceleration of technological development, quality of the institutional environment, and development of human capital determine not only the speed and trajectory of

movement of rural areas in the time-space reference frame but also the quality of the time-space setting (Giddens's "locale"), which, in turn, determines the performance of both individuals and the social system as a whole.

Relying on large agro-holdings solely would not be appropriate either since the agricultural production settings are highly diverse in the Russian regions. There cannot be any unified model of rural economy or combination of various economic forms for such a huge country as Russia.

The strategic objective of rural development based on internal resources can be achieved with the help of institutional, economic, organisational and social instruments:

- improvement of the institutional environment (land, water and forest law codes);
- specification and protection of property rights;
- government policy to protect the interests of domestic producers;
- diversification of the rural economy (development of non-agricultural activities, vernacular arts, recreational areas, rural tourism, etc.);
- withdrawal of marginal lands; development of small and medium business; revival of farming cooperation;
- implementation of the Russian government's national projects;
- development of local self-government; social partnership between the government, business and population;
- promotion of a positive image of the Russian countryman.

Improvement of these instruments is supposed to enhance competitiveness and investment attractiveness of the rural sector, diminish investment risks and increase the performance of all economic entities, including small and medium businesses. The economic interests of the federal centre, local authorities and private businesses should not contradict the social component of rural policy.

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