Strategic priorities of the development of regional national wealth of the Volgograd region

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Abstract — The authors study the essence, main elements and peculiarities of the regional national wealth. The tendencies of the development of regional national wealth of Volgograd region are analyzed. The conclusion about the growth of human and produced capital is made. The conclusion about the quality of environment and about the reduction of the timber resources is made as well. The survey of the inhabitants of the Volgograd region showed that the population of the region evaluates low enough the development of the regional national wealth. The authors develop strategic directions of the development of the regional national wealth of the Volgograd region.

Keywords — regional national wealth, Volgograd region, natural resources, human capital, natural environment, industry, agriculture

I. INTRODUCTION

The index which characterized the regional development in an integrated way is the national wealth or in a broad sense it includes the natural resources and the condition of the natural environment, human capital and produced capital.

In many regions of the Russian Federation including the Volgograd region despite a high industrial potential a low standard of living of population, complicated ecological situation and poorly developed social security sphere are observed. The results of the situation mentioned above are unfavorable dynamics of demographic indices, migration growth of qualified staff and youth into other regions of the country what weakens the social and economic potential of the region and prevents its dynamic development. In this respect the development and implementation of an integrated strategy of the regional wealth growth at the level of the regions of Russia including the development of an efficient system of measures concerning the growth of regional national health in case of its separate elements is indispensable.

The goal of the current research is the determination of the strategic directions of the growth of regional national wealth of the Volgograd region. The tasks of the research are: 1) to precise the definition of national wealth, structure of its elements, its peculiarities; 2) to specify the modern tendencies of the development of the regional national wealth of the Russian Federation and its main constituents on the basis of the study of the indices of social and economic development of the Volgograd region; 3) to assess the satisfaction of the standard of living in the Volgograd region as a result of the development of national wealth on the basis of an elective questioning of the population of the Volgograd region.

II. MATERIALS AND METHODS

For the solution of the first task the methods of abstract and logical approach, subject and object approach, comparative and level analyses were used in the paper.

For the solution of the second task the methodology of the calculation of growth rate of national wealth suggested by M.V. Ledeneva was used [1]. The assessment of the growth rate of the regional national wealth was carried out in the following directions:

- growth of the produced regional national wealth;
- growth of human capital in qualitative (population growth rate) and quantitative aspects (changes in the conditions of health and the educational levels);
- growth of natural resources in quantitative (growth of number of national resources) and qualitative (changes in the quality of the natural environment) aspects.
The solution of the third task was implemented by means of the organization and holding in May-June 2017 of the sociological survey “Satisfaction with the standard of living in the Volgograd region as the result of the development of regional national wealth”. For the creation of a representative sampling, the reduction of the ratio in social groups (gender, age, education, place of living) calculated on the statistical data and the factual one which was obtained on the basis of the analysis of the survey data was made. After the reduction of the structure of the sample multitude and the structure of the general sample the difference in respect of structural indices (shares of the respondents in sub groups) did not exceed 5%. The created sample of population (407 persons) for the general multitude of the Volgograd region 2,535,202 persons including Volgograd implies the confidential probability of 95%. In total 54% of women and 46% men were questioned and this corresponds to the structure of the general multitude in the Volgograd region.

III. RESULTS AND DISCUSSION

A. Notion, structure of constituents and peculiarities of the regional national wealth

The national wealth of the country is the hierarchy structure which consists of the wealth of its regions and of a part which is not distributed between regions (for instance, gold and currency reserves, weapons, strategic reservoirs and others). The regional national wealth is the total of tangible and non tangible values which reflect the measure of its opportunities which present the premises for the production of goods and services and for ensuring the constant and continuous reproduction process.

The constituents of regional national wealth include:

- natural resources being in the federal ownership and in the regional ownership (owned by the subject of the Russian Federation). These resources can also be owned by municipalities, citizens and legal entities.
- fixed capital of the enterprises and organizations of the regions, housing fund of the region;
- stores of enterprises and organizations of the region (materials and supplies, work in process, finished output);
- human capital of regional inhabitants;
- financial assets of population, enterprise, organizations, municipal authorities and regional authorities;
- contracts, hire contracts and licenses, tangible and non tangible assets of enterprises and organizations of the region.

The regional national wealth does not include strategic stocks of Russia, military stocks, systems of weapon inventory, financial resources in federal ownership: federal budget funds, gold and currency reserves, special drawing rights.

Peculiarities of the regional national health are follows:

- national wealth of the region is not fully regional one as it is included into the national wealth of country and belongs to all citizens of Russia [2]. Only territorial assessment of the available wealth in the region is possible in respect of administration level (federal, regional, local);
- a number of elements of the regional national wealth is found in the federal property (for instance, forest reserves, mineral resources, bodies of water). However the problems of natural use, environmental protection and provision of the ecological safety are in a joint jurisdiction of the Russian Federation and its regions (subjects of Federation);
- the regions of the country form a common economic territory (space) within which people, goods, services are freely transferable. In this case portable constituent of the regional wealth can move beyond the regions and sometimes irreversibly. In particular this situation is typical of human capital. It follows hence that regional authorities are expected to pay careful attention to the problem of life standard and quality of life of regional population and also to the support of small and medium sized business;
- the process of reproduction of regional national wealth depends not only on the policy of regional authorities but also considerably on the macroeconomic environment (situation), macroeconomic policy, foreign economic and foreign political situation. Moreover the level of impact of the mentioned factors on the development of various regions of the Russian Federation varies.

B. Contemporary tendency of the development of the regional national wealth in the Volgograd region

For the calculation of the growth rate of the regional national wealth of the Volgograd region the authors used the data of the Federal Service for State Statistics, Volgograd Branch of the Federal Service for State Statistics, Ministry of Education and Science of the Russian Federation [3], [4], [5], [6].

It is worth mentioning considerable difficulties of the calculation of growth rate of the Volgograd region due to the absence of the data of the unfinished construction, material current capital and the property of population in the regions of the Russian Federation. Thus the calculation of the produced wealth in the Volgograd region for 2010 –2015 was calculated as the growth of depreciated book value in constant prices and made up 3.69%.

In the development of human capital in the Volgograd region in 2010 – 2015 the following positive tendencies were observed: growth of the remaining life expectancy, reduction of infant mortality, reduction of morbidity in many types of diseases, growth of index of school enrollment rate. The following negative tendencies in the human capital changes were observed: population decrease, reduction of the access to health care. In the whole the growth rate of human capital made up 19.0% at the expense first of all of the growth of life expectancy and the reduction of morbidity (Index of infant mortality and morbidity reduced by 7.63%). The index of school enrollment rate grew by 8.9%. The quantitative constituent of the human capital taking into account the time of its existence grew by 0.91%. At the same time the population size of the Volgograd region for 2010-2015
reduced by 2.34%, both natural population loss and the migration outflow were negative.

The statistical data published by the Federal Service for State Statistics and its Volgograd branch do not have the information about the reserves of basic strategic resources (oil and gas), their growth and the prices for the resources. The only data which is available is the information about the timber resources on the basis of which the conclusion can be made that for 2010 – 2015 the total volume of timber in the Volgograd region reduced inconsiderably (by 3.41%) [7].

The polluting emissions into the atmosphere and the polluting emissions into the water courses also reduced what allows speaking about the improvement of quality of natural environment. On the basis of the calculations of the authors the growth rate of the quality of the atmospheric air in the Volgograd region made up 3.75%, the quality of waters improved by 44.1% (Fig. 1).

The results of the growth rate of the elements of the regional national wealth in the Volgograd region in 2010 – 2015 allow finding the main problems which should be specifically emphasized at the implementation of the economic policy.

- worn out fixed capital;
- population decrease in the Volgograd region due to natural population loss and migration outflow, replacement of relatively more qualified emigrants going the most perspective regions of Russia (with higher wage rate, more qualified working places, better prospects of career growth) by relatively less qualified immigrants from CIS countries;
- reduction of the accessibility of health care for the population;
- considerable growth of the diseases of the endocrine system and circulatory diseases;
- low quality of the atmospheric air in large industrial centers of the Volgograd region.

C. Assessment of the satisfaction of the population by the standard of living in the Volgograd region

The questioning of the population of the Volgograd region showed that the largest part of respondents have the idea about the regional national wealth and include in it the timber reserves (24.8%), items of cultural values (18.64%), human resources (17.26%), also intellectual values and housing stock (about 9%), production capacities (6.89%) and scientific achievements (5.47%).

The heaviest impact on the satisfaction of the population by the development of the region and the level of the regional national wealth have the following factors: standard of living in the region, unique and memorable events and manifestations in the empirical, political and cultural life of the region and of its history; availability of especially valuable natural resources [8], ecological conditions; traditions, symbols and stereotypes of regional community, ethnic peculiarities; content, character and “frequencies of mention” the information about the region communicated via the central and local mass media.

The positive sides in the image of the Volgograd region (according to 5 grades scale where 1 – absolutely negative, 5 – absolutely positive) are presented by the rich historical heritage, good geographic location, memorable cultural regional events. The negative aspects of life are presented by low wages, infrastructure and growth rate of prices. The factors which had average evaluations are presented by unfavorable ecological situation, law enforcement system and security.

The main reasons reducing the standard of living in the Volgograd region are the outflow of young workers and the staff of the working age into other regions, unattractive jobs, absence of the opportunity to find the job according to specialization, low wages.

When enumerating the problems causing concerns the respondents named ecological factors (28.66%), absence of waste recycling plant (21.77%), condition of purification works (18.07%), worsening of climatic conditions (14.14%) and dangerous ecological conditions for growing generation (13.45%).

The largest part of the respondents (59%) marked that they cannot influence local authorities.

The largest part of respondents think that the regional national wealth is poorly developed, requires further development (46.98%). Meanwhile a considerable share had problems in giving the answer (28.97). The population of the Volgograd region has the need and expectations in the sphere of the development of regional national wealth.

The results of the sociological survey showed the problems indicated earlier in the development (expansion) of the regional national wealth of the region and even made them more precise. The hypothesis confirmed that the satisfaction of the population with the standard of living in Volgograd and in the Volgograd region depend on the level of the regional national wealth.
D. Strategic priorities of the growth rate of the regional national wealth of the Volgograd region

The goal of the strategy of the regional national wealth growth in the Volgograd region for year 2018-2028 is the growth of key elements of the regional national wealth in the Volgograd region and the provision of the standard and quality of life growth of the population on this basis.

The goals of the strategy are:

– improvement of the demographic situation, achievement of natural and migration growth of the population;

– increase of the biophysical human capital by means of improvement of health care of the population, insurance of income growth of the population, reduction of polluting emissions into the atmosphere, development of the physical culture and sports;

– growth of qualification and educational human capital by means of the increase of the quality and accessibility of educational services for the population;

– improvement of internal and external foreign exchange specialization of the region by means of encouragement of the development of innovative production with low resource intensity, support of small business, creation of innovative regional clusters, development of the agriculture, tourism, education, health care, modernization of the existing industrial plants;

– improvement of the ecological situation in the region, restoration of reproducible recourses.

The strategy includes three main blocks: strategy of the development of human capital, strategy of the improvement of the internal and external economic specialization, strategy of the natural capital development and improvement of ecological situation.

The implementation of the strategy implies two stages:

1 stage (2018–2023) implies development of social, transport infrastructure, infrastructure for support of SMEs, creation of the technological park and innovation nets, expansion of the tools of the innovation support of SMEs what will increase the competitive advantages of the Volgograd region, its attractiveness for investors and also the level and quality of life of the population.

2 stage (2024–2028) means the development of industrial regional clusters, of an innovative territorial cluster, structural diversification of the economy of the Volgograd region thank to SMEs, innovation production, attraction of the funds of private investors and of the federal budget.

Some of the key indices of the strategy are shown in Table 1.

<table>
<thead>
<tr>
<th>Index</th>
<th>Value of the index</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>2023</td>
</tr>
<tr>
<td>Birth rate, per 1000 of population</td>
<td>12.0</td>
</tr>
<tr>
<td>Mortality rate, per 1000 of population</td>
<td>13.0</td>
</tr>
<tr>
<td>Migration growth, per 1000 of population</td>
<td>0.0</td>
</tr>
<tr>
<td>Ratio of the average monetary income in the Volgograd region to the corresponding index in the Russian Federation</td>
<td>0.85</td>
</tr>
<tr>
<td>Longevity, years</td>
<td>80</td>
</tr>
<tr>
<td>– women</td>
<td>68</td>
</tr>
<tr>
<td>– men</td>
<td></td>
</tr>
<tr>
<td>Morbidity rate from all diseases, per 1000 of population</td>
<td>600</td>
</tr>
<tr>
<td>Construction and fitting with modern medical equipment of rural health posts</td>
<td>48</td>
</tr>
<tr>
<td>Number of small, macro and medium sized enterprises, thousand items</td>
<td>38</td>
</tr>
<tr>
<td>Number of working sole proprietors, thousand persons</td>
<td>45</td>
</tr>
<tr>
<td>Share of SMEs involved into the technological innovations in the total number of SMEs, %</td>
<td>10</td>
</tr>
<tr>
<td>Share of innovative goods, works and services in the total volume of the shipped goods, performed works, provided services by SMEs, %</td>
<td>25</td>
</tr>
<tr>
<td>Growth of non resource exports, %</td>
<td>20</td>
</tr>
<tr>
<td>Volume of the shipped import replacing production, billion rubles</td>
<td>65</td>
</tr>
<tr>
<td>Emissions of pollutants into the atmosphere form stationary posts, thousand tons</td>
<td>130</td>
</tr>
</tbody>
</table>

The strategic priorities of the development of the Volgograd region should become:

- Restoration of the work in large scale city forming enterprises with the conservation of perspective change of the specialization: attraction of private investors by means of giving them remissions in the programs of state and private partnership; modernization of production, renovation of fixed capital; encouragement of the growth of technology intensive production at the reduction of the ecology consuming production and gradual complete liquidation of “dirty” or ecologically dangerous plants;

- Development of import replacing industrial production. The most preferable are science intensive or “clear” industries (machine construction, textile) within the conception of import replacement in the Volgograd region, use of the funds of the federal budget by means of the participation in federal target programs;

- attraction of investments into the agriculture by means of the implementation of investment programs within government and private partnership and at the support of the federal budget including the investments into the import replacing production; creation of additional
jobs, development of social infrastructure in villages, assistance for young specialists of various specialties;

- encouragement of the development of small and medium sized innovation companies;
- tourism development.

The first in priority is the leading out of the industry of the Volgograd region to a higher technological level, its modernization, specification of “growth points”, increase of the science intensive production. The most perspective from this point of view are chemical industry and machine construction as the most science intensive industries.

It is possible to develop new technology intensive plants in the sphere of information technologies, pharmaceutical, chemical industry by means of the commercialization of the R&D in the higher educational institutions and of scientific and research institutes of the region at the support of the Administration of the Volgograd region of small and medium sized innovation start up companies via the financing of the infrastructure of SMEs support, issuing of innovative vouchers.

In the chemical industry it is possible to develop materials with properties set earlier, new types of low tonnage chemical industry, fine organic synthesis (pharmaceuticals, synthetic additive components for polymers, floating reagents, colouring agents), microbiological agents, production of the advanced refining. In the machine construction the most perspective is the development of machine construction in the oil and gas complex, agricultural machine construction, shipbuilding, tool making industry, some details of heavy engineering. In the textile industry the most perspective are the production of fabrics and clothing and wool processing. It is reasonable also to develop radio electronics, construction materials (sandwich panels, fiber glass pipes, thermal insulation fabrics and materials).

The creation in the Volgograd region of the technological park, industrial parks, development of industrial regional clusters with the creation on their basis of innovative territorial clusters is expected to be perspective. The creation of specialized industrial sites (industrial parks) equipped with the necessary engineering infrastructure, approach lines will contribute to the attraction of investments into the region. It is indispensable to pay attention to the creation of optimal conditions for the coexistence and development of economic residents from various industries, to the creation of additional servicing and services.

The implementation of the projects of state and private partnership, conclusion of special investment contracts between the Administration, private investors and the Ministry for Industrial Development and Commerce will contribute to the attraction of large investors into the Volgograd region.

The informing of export oriented organizations of the Volgograd region about the opportunities of the placement of the information about the production output in the catalogue of Russian export oriented goods and services on the site www.export.gov.ru of Ministry for Economic Development of the Russian Federation; expansion of business missions of the Volgograd region into other countries are suggested as the measures of export encouragement.

For the development of tourism it is suggested to launch railway expresses from Volgograd to Rostov, Voronezh and Saratov regions, to renew the railway vehicles, to improve itineraries and schedules of electric trains; to develop passenger traffic by river transport; to create a common tourist Internet resource of the Volgograd region; to repair roads of regional, municipal and local importance.

The support in the creation of new agricultural markets, assistance for the cooperation of small agricultural producers, organization of municipal enterprises dealing with the purchases of agricultural production and its sale to the population, provision of loans to farmers against the pledge of their future production, organization of storage warehouses for agricultural good equipped with refrigerating systems are suggested as measures for the development of regional agriculture.

It is indispensable to increase the volume of governmental social guarantees to young specialists working in regional state and municipal institutions located in rural settlements of the Volgograd region.

In the environmental protection the following measures are suggested: favourable credit facilities for industrial enterprises for their installation of waste treatment facilities and also for the modernization of the equipment of purification work which contribute to the reduction of the volume of wastes; elimination of the unsanctioned dumps in the Volgograd region; gathering of the waste from the river banks of Volga and Akhtuba, landscaping and clearing up the riverside up to the sanitary standards; removal of the sludge collector of especially dangerous chemical wastes “White Sea”; closing in of the injection of poisonous waste of the chemical company «Volzhskiy orgsintez» into the saline dome and the recovery of use of the system of treatment facilities after the running out of the license term from the Ministry for Natural Resources for the subsoil use for the deposition of liquid toxic wastes and so on.

For the development of the human capital in the Volgograd region in particular it is suggested:

- provision of subsidies for the purchase of houses to young families and multi-child families, relocation of citizens from unfit housing facilities, supply of low income citizens with housing;
- growth of number of the centers of youth innovation creative work, opening of robototronics centers, 3-D modeling, opening of similar centers and hobby groups in Volzhskiy, Mikhailovka, Frolovo, neighbouring centers of the Volgograd region;
- issuing vouchers for the monthly provision the kids with services of supplementary education including the preparatory courses for unified national exam paid by the Administration of the region and municipalities;
- individual housing construction and movement to the city planning frame of agglomerations including the
program of the construction of individual housing for young families;

• increase of rural first aid stations equipped in compliance with modern requirements in rural settlement of the Volgograd region.

The tools of the implementation of the Strategy are regional and municipal programs and plans, funds from federal target programs, state and government partnership, investment agreements, agreements and contracts which allow attracting external resources and coordinating the activity of municipal administrations, of government, municipal and private organizations, issuing innovation vouchers, vouchers for the supplementary education of children and so on.

IV. CONCLUSION

The implementation of the strategic directions of the development of the regional national wealth in the Volgograd region will contribute to the increase of the human capital in the Volgograd region in its quantitative and qualitative aspects, to the improvement of the specialization of the Volgograd region, gross regional product (GDP) growth, growth of the income level of the population and also to the growth of the revenues of the regional budget and to the improvement of the ecological situation.

Acknowledgment

The research was financially supported by the Russian Fund for Fundamental Research and by the Administration of the Volgograd region within the research project № 16-12-34023 «Development of the growth rate strategy of the regional national wealth of the Volgograd region».

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