

SCIENTIFIC REVIEWS. OPINIONS

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A Fundamental Work on the Experience of Research into the Prospects for Development and Distribution of Productive Forces

The article is devoted to the publication of the book: Adamesku A. A. *Pervaya General'naya skhema: opyt ob"edineniya nauchnykh organizatsii dlya obosnovaniya perspektivnogo razmeshcheniya proizvoditel'nykh sil* [The First General Scheme: the experience of research organizations consolidation for the purpose of substantiating the strategic distribution of productive forces]. Moscow: SOPS, 2016. 328 p.

The renunciation of the Soviet economic system and a forced transition in the 1990s to market economy in Russia was accompanied by the destruction of government planning bodies, the curtailment of the accumulated practices of pre-planning works and long-range forecasting. The reformers were convinced that market itself would choose optimal industry development trends and determine their rational distribution throughout the country. They also claimed that market mechanisms would promote a more efficient use of labor resources, ensure their rapid transfer to the location of priority industries. But forced implementation of free market principles has not resulted in intended progress, but brought tremendous losses in many areas of economic and social life of the country.

The process of market system formation in Russia demonstrates that its arsenal is much wider than a set of mechanisms called

the free market. The experience of developed capitalist countries shows that the most important tools for ensuring national economy growth is planning and forecasting. The key points of this "tool set" are formed, as a rule, on the basis of the examination of the results of the Soviet practice of developing and implementing five-year plans. And it is not a coincidence that country's respected scholars, sober-minded analytical experts, economic managers and representatives of patriotic community emphasize the necessity of modern strategic approaches to the development of our country. In this regard, the fact that the Russian Federation began the development of a strategic planning system at both federal and regional levels is more than satisfying. According to the provisions of the Federal Law "On strategic planning in the Russian Federation" dated June 28, 2014 No. 172-FL, the Strategy of Spatial Development of the Russian Federation and the Strategies

of Socio-Economic Development of Macroregions and Federal Subjects of the Russian Federation are considered the basic documents at the level of goal setting, defining the spatial development of our country. The government of the Russian Federation adopted a resolution “On the Content, Composition, Execution and Approval Procedure of the Strategy of Spatial Development of the Russian Federation, as well as on Monitoring and Control Procedures of Its Implementation” dated 25 August, 2015 No. 870. According to the resolution, the Strategy “is a strategic planning document which determines the priorities, purposes and objectives of the integrated regional development of the Russian Federation aimed at maintaining a stable settlement system in the territory of the Russian Federation and lifting infrastructural restrictions in socio-economic development of the territories, including proposals for improving the settlement system and priority areas of distribution of productive forces in the territory of the Russian Federation”.

The retrieval of unrivalled experience in strategic planning accumulated by the Soviet Union, especially since the early 1960s during the formation of high-integrated economy which held a leading position in the world by various indicators is, in these circumstances, more and more important. Such economy, being based on state property and command and administration system, required great effort to maintain and improve its

proportions. At that period the heightened need for complex forecasting took place. Systematic, large-scale and comprehensive studies focused on complex analysis and forecasting became mandatory, covering all key problems of territorial development and distribution of productive forces in a vast and resource-rich country. This implied both the expansion of technical, economic and balance settlements and the transition to long-term comprehensive schemes of development and distribution of productive forces. That was the goal set before the Council for Study of Productive Forces (SOPS). The history of SOPS dates back to the beginning of 1915, when the Russian Imperial Academy of Sciences on the initiative of academician V.I. Vernadsky together with a group of leading scientists made a decision to establish the Commission for Study of Natural Productive Forces in Russia (KEPS). In 1930 it was transformed into the Council for Study of Productive Forces and still bears the name. The monograph under review is dedicated to the 100th anniversary of the Commission on the study of natural productive forces – the Council for study of productive forces (KEPS – SOPS).

In 1960, the SOPS passed to the control of Gosplan of the USSR (State Planning Committee). Under its leadership in the 1960–1980s SOPS developed General Schemes for the periods 1971–1980 (with a detailed emphasis on 1971–1975), 1976–1990 (with a detailed validation of 1976–1980), as well as for the period from 2000 till 2015 (completed in 1989).

In a recent monograph of A.A. Adamesku only the first General scheme for 1971–1980 is described. It was the first experience in our country of successful coordination of almost all leading institutes and scientific centers in economic research activities. Five hundred and sixty research and design institutes took part in the development of sectoral and territorial schemes, overall projects of which were included as sections into the General scheme. The process was supervised by the USSR Gosplan, its departments formed special work groups which controlled and adjusted schemes preparation and evaluation of results.

The final amount of deliverables to the General scheme amounted to more than 50 volumes. “One work, as the author himself notes in the preface, was not aimed at presenting in detail all the variety of problems studied in the first General scheme of distribution of productive forces in 1971–1980, that seems practically impossible”. The author’s attention is drawn primarily to methodological approaches, main trends and conceptual points of productive forces development in the period at issue. Nevertheless, almost every chapter of the book reflects wide personal experience of the author, who is an active participant in the development of the first General scheme, having worked at SOPS for over fifty years. This experience, as well as the ability to creatively summarize and concisely outline the results of work with archive funds have become scientific products which give their reader a feeling of true satisfaction.

Of course, as it is always extremely important in scientific works, the matter of

greatest interest is the author’s presentation of methodological and methodological aspects. According to the author, the methodology of pre-planned works included a short program of the General scheme, the organization of works, methodological provisions, including general provisions and basic materials for the development of the General scheme, schemes for development and distribution of leading national economy sectors, schemes for development and distribution of productive forces of the Union republics and Regions of the USSR, schemes for the development of new enterprises and the formation of industrial complexes. Along with the General methodology a complex of partial methodological materials was developed. During the process of research conducting, mathematical calculation methods were developed and implemented with the use of electronic computers for the first at this level.

The author characterizes in details the basic scientific principles of the General methodology the General scheme development for 1971–1980. That enables the readers to understand the economic nature of the problems which were solved by the developers.

The main scientific materials for the development of the General scheme included the analysis of the factual economic base of development and distribution of national economy and source data development of production levels for 1975 and 1980. By economic base, as A.A. Adamesku points out, the developers implied the USSR level of development of productive

forces and their distribution throughout the republics and the regions. The economic base of the sector and the economic base of the regions were considered separately according to a special list of research problems. The baseline for determining the scale of long term development of national economy was the estimation of social needs for products and services and the evaluation of real possibilities of their satisfaction taking into account scientific and technological progress, population growth and increasing consumption level. In our opinion, such conceptual approach, even in strategic economy development plans of modern Russia, would both contribute to a real change of situation and exclude overestimation of positive changes, rather small-scale and limited in variety.

A fundamental feature of the General scheme for 1971–1980 consisted in the fact that the calculations for production distribution of main product types by executive institutions were carried out on three-levelled options: the first – lower level, the second – middle level, the third – upper level. The availability of options was based on the differences in the national income distribution between consumption and accumulation funds and, therefore, different capital investments volumes. According to A.A. Adamesku, such three-option calculations help take into a more differentiated account the impact of scientific and technological progress and factors defining dynamics of economic sector development and the economy of the regions.

Exceptional scientific and practical significance of the methodology consisted in the establishment of the criterion of economic efficiency of production distribution and the overall system of indicators, uniform for all sections of the General scheme. The criterion of sector distribution efficiency and the complexity of area development were obtaining the planned quantities of products with lowest expenses. On a national economic scale this conformed to the objective of maximizing national income.

Production costs with regard to its delivery to consumers and relative capital investments were taken as specific performance indices of new production facilities. According to latest research, the rate of cost reduction, not profit growth reflects the nature of economic efficiency¹.

The best option of production distribution was determined by the minimum of discounted costs by the formula:

$$D = P + C \times R,$$

where D – discounted costs (combined costs);

P – product costs (including delivery to the consumer);

C – capital investments;

R – regulatory sector coefficient of comparative capital investment efficiency.

¹ See, for example: Gubanov S. Glavy goskompanii: s chem svyazat' ikh voznagrazhdenie? (Opyt politekonomicheskogo analiza) [Heads of state-owned companies: what their reward can be linked to? (An experience of political economy analysis)]. *Ekonomist* [Economist], 2016, no. 4.

The most important method of the General scheme development, as A.A. Adamesku emphasizes, was the balance method. In particular, balance calculations for 1975 were made, namely, calculations of production and consumption of major industrial and agricultural products by sectors, republics and regions; calculations of energy balance, labor and water resource balances.

Now that four decades have passed since the beginning of the work on the Scheme, it may again be emphasized that the methodology was prepared at the scientific level which optimally reflects the status of science and technology at the time productive forces distribution.

It is expected, judging by the very title of the monograph, that a considerable amount of its content will be devoted to the description of the contents of the first General scheme. And the expectations are met: the section with the description occupies three quarters of the monograph. The section title has, in our view, a very constructive wording: “The main development directions and trends of productive forces of the USSR in 1917–1980”. Professor A.A. Adamesku not only extracts the key conditions for the reader, contained in the volumes of the General scheme, but also uses this construction to present, where appropriate, his own brief judgments from the perspective of modern times. This approach strengthens the reader’s attention to the text, contributes to the author’s willingness to share his experience with the specialists and

developers of the prospective development strategy of the modern Russian state.

The combined products of the General scheme cover, first of all, problematic issues such as country’s population and labor resources, main directions of industry development (by ten sectors), overall economic indicators of the national economy (gross social product, national income, capital investments). The author’s overview of the composition of work on all these aspects is generated explicitly and with great professional skills generalizes and highlights the gist to the reader.

This qualitative aspect of the monograph is, in our view, particularly pronounced in the presentation of the content of schemes of perspective development of productive forces of the Union republics and economic regions of the USSR.

Let us make just one example in this regard. It concerns final concepts on the problems and trends of development of the Northwestern economic region in 1971–1980. At the time of framing the Scheme the Northwestern economic region included the city of Leningrad, the Leningrad, Arkhangelsk, Vologda, Murmansk, Novgorod and Pskov oblasts, and the republics of Karelia and Komi. The most important objectives of the North-West economy development, states A.A. Adamesku, were:

- alleviation of current excessive industry concentration by ceasing new construction in Leningrad, namely by creating a network of industrial centers complementing its industrial complex, and

by accelerating industry development in other oblasts and autonomous republics of the North-West;

- rationalization of the energy balance by improving its structure with the help of reduced imports of expensive fossil fuels and their replacement with more economical fuels (residual oil and natural gas), as well as by full use of energy resources;

- wide deployment of exploration work and geological researches in the Timan-Pechora Basin aimed at a significant increase in commercial oil and gas reserves and a sharp increase in their extraction and procession in the area;

- best use of fixed assets and labor resources of the area;

- commercialization of cost-effective for industrialization rich mineral resources of the Murmansk and Arkhangelsk oblasts, the Republic of Komi and the Karelian ASSR such as apatite, copper-nickel and iron ores and rare metals of the Kola Peninsula, Murmansk and Karelian mica and Severoonezhsk bauxite deposits;

- organization of complex use of wood materials, reconstruction of existing and construction of new large timber industry complexes for extensive chemical and mechanical wood processing with maximum use of low quality raw materials and wood in the basins of the Pechora and the Mezen rivers and in other Northwestern regions; reforestation on a larger scale;

- rapid development of chemical industry – significant production development of phosphate fertilizers based on the Khibiny apatites and local phosphate

rocks; production development of nitrogen fertilizers, other chemical products on the basis of the using oil and natural gas resources and waste sulphurous gases of non-ferrous metallurgy;

- accelerated development of advanced branches of mechanical engineering for the needs of chemical industry and agriculture, tool, electronic and semiconductor engineering, power and electrical engineering and ship construction;

- elimination of disparities between the fishing fleet and its shore-based and depot ships;

- specialization of agricultural area in highly productive meat and milk cattle breeding, in flax cultivation and in production of potatoes, vegetables, pork and poultry products in suburban areas;

- development of all means of transport, completion of railway constructions which give access to rich natural resources of the North-West.

This article would like to introduce the author's conclusions which still have not lost its significance for the vast majority of economic regions of Russia. But the issue of fundamental importance is that the development of the General scheme contributed to significant progress in the amount of output produced within the territorial boundaries of all oblasts, kraia and autonomous and union republics. It also promoted the development of interregional relations and the improvement of inland proportions of economic and social development.

That was the case of the Northwestern region which was mentioned above. Thus in the Vologda Oblast (part of the region) in 1971–1980 the size of industrial and production assets increased by 2.7 times and industrial output – by 1.7 times in real terms. Labor productivity in industry increased by 1.5 times, which resulted in a three quarters of industrial output growth. Rolling manufacture commodity output, which in 1970 was 5.8 million tons, reached 8.7 million tons in 1980. The use in 1980 of increased production capacities provided 3 million conventional tons of mineral fertilizers and 77 million pieces of rolling bearings. The production of hardboards doubled from 14.7 million to 31.5 million units, and chipboard production multiplied from 54.9 thousand to 195.8 thousand cubic meters, i.e. by almost four times. Continued growth of basic production assets in agricultural sector provided productivity growth in state farms (sovkhozes) and collective farms (kolkhozes) by 1.5 times. Mass development of industrial technology in poultry and swine breeding along with cattle fattening provided an opportunity to increase (by 57.0%) meat production (in slaughter weight) from 54.3 thousand in 1970 to 85.7 thousand tons in 1980, and egg production – from 252.2 million to 426.3 million units. The settlement pattern of the region significantly changed: the proportion of urban population increased from 48% in 1970 to 64% in 1980, while the share of rural residents decreased accordingly, which was the natural result of accelerating industrial development in the region. Progress in

material and cultural standard of living was also notable.

Salary raise of factory and office workers as well as collective farmers' wages led to an increase in turnover by one and a half times, to an increased acquisition of household appliances and other manufactured products². But, unfortunately, the imbalance between the volume of consumption demands and the degree of their satisfaction was decreasing rather slowly, which affected public mood. It was necessary to strengthen the determination in long-term planning solutions to these issues.

Returning to the assessment of the monograph under review, its author's main achievement is the presentation of his judgments concerning the benefits of the experience of developing the General scheme of productive forces development in 1971–1980. "The General scheme, as A.A. Adamesku believes (and proves convincingly), represented a scientific forecast justification of regional distribution of country's productive forces for a long period with variant techno-economic balance calculation" (p. 276). This consolidated pre-planning document of analytical and predictive nature has

² The values presented in the article are calculated with the use of the following sources: *Narodnoe khozyaistvo Vologodskoi oblasti v vos'moi pyatiletke: stat. sbornik* [National economy of the Vologda Oblast during the eighth five-year plan: statistics collection]. Severo-Zapadnoe knizhnoe izdatel'stvo, 1971; *Narodnoe khozyaistvo Vologodskoi oblasti v devyatoi pyatiletke: stat. sbornik* [National economy of the Vologda Oblast during the ninth five-year plan: statistics collection]. Severo-Zapadnoe knizhnoe izdatel'stvo, 1976; *Narodnoe khozyaistvo Vologodskoi oblasti v desyatoi pyatiletke: v 2-kh chastyakh* [National economy of the Vologda Oblast during the tenth five-year plan: in two parts]. Vologda: Statisticheskoe upravlenie Vologodskoi oblasti, 1981.

justified optimal territorial proportions of the national economy, ways of increasing efficiency of public production and people's welfare based on the improvement of public territorial labor division, on a proper combination of target development and industry distribution combined with systematic formation of an economic complex of republics and regions.

Professor A.A. Adamesku still continues active research work. Therefore, it would be unnatural if he had not considered in his book the issues of improving the forecast development of Russia's socio-economic development at the current stage of its political, economic and social development. The monograph presents a separate section dedicated to this issue. The author elaborates further on the most relevant issues of the organization of strategic planning by current government. In the author's opinion, the country still lacks the necessary consistency and the correlation between industrial and regional development, which results in significant losses, reduced efficiency and, ultimately, hinders the development of Russia. As negative examples for addressing key issues of modern strategy A. Adamesku mentioned a non-integrated approach to the development of the zone of the Baikal–Amur Mainline and other regions of Siberia and the Far East, failures in establishing and implementing measures for labor resources use in the North-Caucasian and Southern Federal districts. A. Adamesku believes that insufficient attention is paid to the development of the complex project “Ural Industrial – Ural Polar”.

Having acquired significant experience in life and science, A.A. Adamesku considered the possibility of elaborating a comprehensive document aimed at identifying and staged solution of country's long-term development issues conditionally entitled “The General scheme of development and distribution of productive forces of the Russian Federation”. The author is convinced that “only within the General scheme may the geostrategic interests of Russia and economic space evolution under the conditions of globalization be taken into account, since the development of Russia will be determined by global economic, environmental and political trends” (p. 283).

Following the author's idea, argued in the final section of the monograph, we would also wish to add that only a document such as the General scheme is capable of fully ensuring the establishment of better productive and social infrastructure as well as of considering its long-term payback and subsequent exploitation by all economic entities, in due time and from a national perspective.

The final conclusion is as follows: the monograph of A.A. Adamesku, being a source of fundamental knowledge and its practical application, encourages the search for ways of reviving and developing Russia's economic power of the Russian state. It is one of those works which can be called a handbook for both qualified economists, managers and for young people engaging in professional environment of this type.

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