R. I. Nigmatulin¹

LANDMARKS FOR PHASED TRANSITION TO SOCIO-ECONOMIC GROWTH IN RUSSIA

The socio-economic strategy established in Russia over the past ten years has become unpromising and even dangerous, especially after the multifaceted break with the West.

Until the majority of Russia's population and intellectuals realize that the current leadership of the socio-economic block of the Government and corporations are brining the country's economy further and further to a dead end. Which means that realization will come when the exit is weighted by social collapses.

Our economy is growing slower than the economy of the most countries. According to the World Bank, in the period from 2013 to within 10 years the average annual GDP growth was 0.9%, and in the world it was 3.1 times higher, including in Poland 4.7 times higher, in South Korea 3.2 times higher, in the USA and EU 2.7 times higher, in China 7.5 times higher. After 2012, the real incomes of the bulk of the population are not growing.

Manufacture of the means of production has been destroyed. The leaders of the economic block of the Govern-

¹ Scientific Director at P. P. Shirshov Institute of Oceanology of the RAS, Member of the Presidium of the RAS, Academician of the RAS, Dr. Sc. (Physical and Mathematical Sciences), Professor. Head of the Department of Gas and Wave Dynamics, Faculty of Mechanics and Mathematics, Lomonosov Moscow State University, Professor at the Skolkovo Institute of Science and Technology. Author of more than 200 scientific publications, including monographs: "Fundamentals of Mechanics of Heterogeneous Media", "Dynamics of Multiphase Media", "Continuum Mechanics", "How to Equip the Economy and Power of Russia: Analysis from the Engineer and Mathematician", "The Crisis and Modernization of Russia – 13 Theorems", "4E of our Life – Ecology, Energy, Economics, Ethnicity", and others. Has 21 certificates of authorship for inventions. Member of the Russian National Committee on Theoretical and Applied Mechanics, the International Petroleum Academy, the International Union of Theoretical and Applied Mechanics, and the Islamic World Academy of Sciences. Member of editorial boards of 10 leading international journals in mechanics and thermophysics. Recipient of the Lenin Komsomol Prize, the USSR State Prize, and the Russian Government's prizes in science and technology. Awarded VDNHk USSR Gold Medal, the Medal of Academy of Sciences of the Republic of Tatarstan "For Achievements in Science", the Orders of Honor, "For Merit to the Fatherland" IV class, Alexander Nevsky, and others. Honorary Doctor of Kazan University and Kyrgyz Polytechnic University.

ment and corporations have turned the domestic machine building industry into an assembly workshop of parts produced abroad. They also turned domestic agriculture, which provides only 4–5% of GDP, into an agricultural holding of Western technologies, Western seed and breeding stock. Only 6% of the seeds were left to domestic production.

A serious threat to the country's technological sovereignty has emerged.

Although GDP grew by 3.5% in 2023 and personal income grew by 4.5%, but this was achieved at the expense of procurement to support the military sector amid a significant increase in government expenditures. This growth cannot ensure the improvement of the socio-economic situation of the bulk of the country's population living poorly by European standards.

The current strategy ensures small investments in fixed capital, which cannot ensure economic growth through new non-resource industries and learning to use new technologies. This strategy maintains the poverty of Russia's population and the glaring socio-economic inequality between citizens and between regions. Moreover, even those investments, which are invested in fixed capital, cause 1.5 times lower *economic growth* and 1.5–2 times higher *investment inflation* compared to Europe.

Under the current socio-economic order, the Russian Government is failing in its main task of creating conditions for human development. Our expenditures on education, science, scientific and technical development and health care as a share of GDP are two times less than in Europe and other developed countries. In addition to low funding, these areas are being destroyed by ridiculous bureaucratic reforms of a pernicious nature. And that's for more than 30 years.

Since 2000, the number of public schools, hospital organizations has decreased by half. The number of academic researchers continues to decline. In terms of their number per capita, we rank 29th.

We have come close to a demographic catastrophe due to low birth rates and the highest mortality rate in Europe. Natural population loss exceeds 0.5 million people per year. The working age mortality rate exceeds the European level by 2.8 times among men and two times among women. According to the rating of the authoritative international magazine Lancet, which is determined by 33 indicators, Russia is 119th among 187 countries in terms of population health.

In the next 10 years Russia will experience an acute shortage of labor resources as workers of all qualifications, as well as engineers, technologists and designers.

The strategy of the last ten years has become futile and even dangerous especially after the multifaceted break with the West

Until the majority of Russia's population and intellectuals realize that the current leadership of the socio-economic block of the Government and corporations are brining the country's economy further and further to a dead end. Which means that realization will come when the exit is weighted by social collapses.

Since 2012, the President of Russia has been issuing May Decrees that set actual national development goals for the Russian Federation. In particular, the 2012 Decree set the following goals for fulfillment by 2020: to create 25 million high-tech jobs, to overcome poverty, middle class – more than 50% of the population. These goals have not been achieved to date. The goal was to achieve a minimum wage of 24 thousand rubles/month and an average wage of 70 thousand rubles/month. But even with cumulative inflation from 2012 to 2023 exceeding 220% (price increases of more than 2.2 times), this level of wages has not yet been reached.

The 2018 Decree prescribed the following goals to be achieved by 2024: sustainable population growth, life expectancy of 78 years, poverty reduction by two times, becoming one of the top ten countries in the world in terms of quality of education and R&D, etc. The deadline for achieving these goals from 2024 was later pushed back to 2030 due to the coronavirus pandemic and the SMO.

But also these goals cannot be achieved even by 2030 unless the socio-economic order is changed, and this requires the following measures consisting of seven items.

- 1. Change of personnel policy in the economic block of the Government and state corporations. Elevate the role of engineers and specialists who have shown real achievement in manufacturing. Remove from the leadership those who, contrary to the repeated warnings of specialists, brought the Russian socio-economic sphere to its current dire state. Take out those who initiated the reforms that destroyed education and science (including after 2010) and thus destroyed the foundation of socio-economic efficiency.
- 1.1. Abandon the current personnel policy of appointing managers who have not completed the necessary steps of learning the profession and leadership experience. Major scientists, specialists and engineers should occupy leading positions in the leadership of sectoral ministries.
- 1.2. Restore and develop the engineering education system by restoring physical and mathematical training at secondary schools and polytechnic universities.
- 1.3. Prepare measures to prioritize the training of engineers, technicians and skilled workers. Raise their prestige

and salaries, increase the salaries of university and vocational school teachers by two or three times, making them the same for all regions.

- 1.4. The leadership of ministries responsible for education and science, the management of educational and scientific institutions should be carried out by specialists with real scientific, educational and practical experience. The rise of Russian education and science is not connected with a variation of the Bologna and other systems, but with the restoration of the leadership of those who *lecture*, *teach and research*.
- 1.5. In order to implement the national projects in the sphere of education, science and culture, it is necessary to increase consolidated budget expenditures thereon by two times within 5 years, reaching at least the level of the new EU countries: 8% of GDP for education, 2.5% of GDP for science, and 1% of GDP for culture.
- 2. For economic growth at a rate of 3–5% per year due to the growth of non-resource goods production, for creation of new industries and mastering new technologies, it is necessary to abandon the accumulation of resources in reserve funds of more than 15% of GDP, abandon the budget rule and use resources for "investment attack" with the growth of investment in fixed capital (IFC) at a rate of 5–7% per year.
- 2.1. With the current structure of productive forces, their provision, low efficiency, weak human resources and systemic corruption, the relative growth of investments $\Delta \overline{I}$ will cause an additional impulse of investment inflation $\Phi_{\rm C}$ at the level of $\Phi_{\rm C}\approx 2\,\overline{\Delta I}$, which is twice higher not only than in the EU countries, but also in Turkey.
- 2.2. Therefore, simultaneously with the growth of investments, it is necessary to improve the personnel composition of managers of enterprises realizing investments, managers of financial institutions and the system of selection of investment projects.
- 2.3. To increase the efficiency of investment in the Russian economy, which is 1.5 times lower than in the EU countries and other developed and developing countries, it is necessary to increase expenditure on scientific and technical development from 5% to 10% of GDP, to oblige the main "production" ministries and large state corporations to have their own supporting design and research institutes, staffed with scientists and engineers. All strategic decisions and projects should be tested and authorized by these institutions.
- 3. Reform the tax system by substantially reducing taxes on production and business (especially on the part of profit that goes to investments in fixed capital), shifting them to the large incomes of individuals and their rich property, taking into account world practice. In particular, implement the following measures, which have been implemented long ago in growing economies:
- 3.1. The share of the consolidated state budget should increase from 34% to 45% within five years, and in other five years to 50% of GDP.
- 3.2. Introduce a progressive income tax scale with non-taxable income up to 20 kP / month, and increasing rates from 13 to 30% as income rises, and substantially increase taxes on rich property and rich inheritance. This will make it possible to achieve the above European levels of GDP shares for state budget expenditures (item 3a), including education, science, culture and health (see item 1d).

- 3.3. Within five years, gradually reduce the VAT rate by two times, canceling VAT refunds to exporters of raw materials.
- 3.4. It is necessary to redistribute tax revenues in favor of regional and municipal budgets, increasing the share of taxes left in the producing regions.
- 3.5. Enforce controls and restrict the export of capital abroad, separating it from paying for imports.
- 3.6. Mobilize the banks' funds, which amount to more than 120 trillion rubles. Bankers' income should be at the expense of the implementation of production projects, while income from speculative operations should be subject to high tax rates. Banks should improve the system for selecting investment projects and controlling the use of loans.
 - 3.7. Simplify tax reporting.
- 4. Develop and implement a national project for the development of small and medium-sized enterprises (SMEs), including for import substitution of goods that we can produce at our enterprises. The contribution of SMEs to GDP should grow from 20 to 40–50%, following the example of developed and developing countries.
- 5. Ensure a balanced economy. To accomplish this the following measures are necessary:
- 5.1. Since the prices for raw materials, fuel, electricity and metals in our country are twice as high as in the United States in terms of purchasing power parity and in relation to the prices of national goods, it is necessary to achieve a significant reduction in the domestic market. For this purpose, unreasonable expenses and losses from inefficient management should be taken out of prices, and excessive taxes and other state deductions should be taken out of domestic prices, transferring them to the export part of raw materials, the physical volume of which exceeds domestic consumption by 2–4 times.

The following balance sheet ratios should be used.

- The price of 1 kg of plain bread should be equal to the price of three liters of gasoline.
- The minimum monthly wage should be equal to the cost of 1,000 liters of gasoline or 6,000 kW×h of electricity.
- The minimum monthly wage must be equal to 50% of the average wage.

- 5.2. Introduce mechanisms to reduce costs, to better control prices, which should moderately exceed costs, and to control the wage fund, which should moderately exceed the price fund of consumer goods.
- 5.3. Introduce mechanisms to redistribute the income of companies and enterprises in favor of paying the bulk of workers so that the incomes of 95% of the population increase from 45 to 60% of GDP (they amount to 70% in the new EU countries). At the same time, these incomes should be balanced with the production of goods and services and their imports, taking into account the advice given by Ludwig Erhard, the leader of the economic miracle of post-war Germany: "buyer demand should moderately outstrip production capacity."
- 6. The following measures are needed to overcome the acute demographic crisis associated with the highest mortality rate in Europe and falling birth rates.
- 6.1. Increase health care expenditure from 3.7% of GDP to the European level of 7.5% within 5 years.
- 6.2. In addition to improving the welfare of the population, there is a need for a program to support motherhood and childhood with a significant increase in its financing (from 1 to 2% of GDP) within five years. It is necessary to double the maternity capital for each child born and monthly payments to mothers of two or more children under the age of 7 at least half of the average median payment in the region. Additionally, social expenditures on preschool and school education, children's leisure, physical education and sports will need to be increased by 1% of GDP.

Some of the funds for this purpose can be provided by the small-family tax which was 6% of taxpayer income until the 1960s.

- 6.3. In order to overcome the crisis due to the acute shortage of labor resources, it is necessary to develop a program to attract immigration of labor resources from the republics of the former USSR that share the civilizational values of Russia.
- 6.4. To implement all the above measures, the country's leadership must get out of the captivity of imaginary economic advances. The people and their leaders must show political will. There is no doubt that the vast majority of the Russian people will support such will. Financial, scientific, organizational and methodological problems are *solvable*.