DAGHESTAN ECONOMY ON THE THRESHOLD OF A NEW STAGE OF REFORM

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or the Daghestan economy, as well as for the Russian economy as a whole, the 21st century has brought an end to the recession; a general stabilization and incipient growth of most macroeconomic indicators. But before we go on to examine the possible ways of economic recovery, let us make an assessment of the starting conditions for this new stage in the republic's economic and social development.

In the ten years of market reform, industrial output in Daghestan has fallen 4.5 times, including 1.52 times in engineering, 5.1 times in the food industry and 11.6 times in the light industry, while agricultural output has fallen 2.5 times. The final decade of the 20th century ended in a collapse of the republic's economy and an unprecedented drop in the living standards of an overwhelming majority of its population. That was due, in the first place, to the institutional inability of the republic's state-run economy to adjust to market conditions, its structural deficiencies and the unfavorable geopolitical conditions after the breakup of the U.S.S.R. It turned out that the republic's industry and agriculture were less developed, less independent and more socialized than those of other RF constituencies.

Moreover, Daghestan has turned out to be a region, on the one hand, lying close to the "hot spots" of the Caucasus and, on the other, far removed from the areas of real and potential economic growth in Russia. Internal factors, such as the highly uneven distribution of the productive forces, have also played an important role. Daghestan's entire production potential is concentrated in the lowland and foothill zones, whereas in mountain areas there are no sufficiently developed industrial or agrarian structures that could enable their inhabitants to survive on their own in market conditions. These areas are characterized by a subsistence economy, a poorly developed production and social sphere and a harsh climate, especially in winter. Leaving these areas to fend for themselves in the new marketplace without any economic or social support would amount to putting them on the brink of extinction.

Unequal conditions of economic activity largely explain the different "economic mentality" of the moun-

tain peoples, which makes it necessary to develop a special tactics for introducing market relations. Today it is quite obvious that the failure to take measures facilitating the transition from the planned economy to a market economy was one of the most significant causes of the slump in economic activity in the 1990s.

Daghestan's development peculiarities have also resulted in greater vulnerability of the industrial organism to radical reforms, which has manifested itself not only in the economy, but also in the field of domestic politics. The breakup of the Soviet Union has had an extremely painful effect on the republic. Once an internal territory of the U.S.S.R., it has turned into a border region of Russia at the epicenter of tough geopolitical pressure by some neighboring countries, and also by other states pursuing their interests in the Northern Caucasus. At the same time, the hopes that economic development in the republic would be intensified as it acquired the status of Russia's "gateway" to the countries of the Middle East and South Asia have so far not been justified. On the contrary, the rupture of production ties between Russian business entities and enterprises in the Transcaucasian republics led to a sharp decline in freight traffic across the territory of Daghestan, contributing to an actual reduction in its "transport accessibility" in relation to other parts of the country. The situation in this sphere took a further turn for the worse with the development of the Chechen conflict. In fact, one could say there was a transport blockade of the republic, which naturally had an effect on the production performance of its enterprises, on interregional economic exchange and ultimately on its overall socioeconomic position.

All these factors badly tarnished the economic image of the region and reduced its investment attractiveness. As a result, the republic lost a significant part of the financial infusions into its economy, which was one of the main causes of long-term stagnation. In the 1990s, most of the key indicators of economic and social development in Daghestan exceeded the critical levels accepted in world practice, reflecting the emergence of a number of extremely negative trends (see Table 1).

 $Table\ 1$ Comparison of Critical Levels and Daghestan's Actual Development Indicators (2000)

		Critical levels	Figures for Daghestan			
	Economy					
1	Decline in industrial production	30-40%	77.7%			
2	Share of goods imported from other regions and countries	30%	77%			
3	Share of manufactured products in exports	45%	12%			
4	Share of high technology products in exports	10-15%	1.5%			
5	Share of transfers and subsidies in the regional budget	30-40%	87.7%			
	Social sphere					
6	Share of population living below the poverty line	10%	43.1%			
7	Ratio between minimum and average wages	1:3	1:8			
8	Unemployment rate (including hidden unemployment)	8-10%	20.1			
9	Spending on environmental protection measures, % of GRP	5%	0.009%			

According to estimates based on data for the late 1990s, in order to achieve the national average for per capita GRP (gross regional product) given its growth at an annual rate of 3%, it will take Daghestan 54 years if the republic's economy grows at an average annual rate of 6%, 33 years if it grows at a rate of 8%, and 24 years at a rate of 10%. And if the rate of growth of the national average is 5%, the figures for Daghestan will go up, respectively, to 116 years, 55 years and 33 years. Other republics of the Southern Federal District would take a much shorter time to achieve such a goal.¹

Gross Regional Product: Ups and Downs

In recent years, steps have been taken at national and regional level to introduce a system of macroeconomic indicators for a quantitative assessment of economic activity. As applied to the regions, this system includes the following indicators:

- gross regional product, which measures the production performance of resident economic units over a specified period;
- actual final consumption of households, which reflects the end use of goods and services. It takes into account that households consume goods and services at the expense of their own income and nonmarket services (health care, education, culture, etc.) at the expense of the state and

¹ See: Put' v XXI vek. Strategicheskie problemy i perspektivy rossiiskoi ekonomiki, Ekonomika Publishers, Moscow, 1999, p. 584.

nonprofit organizations, available to them in the form of in-kind transfers. This indicator is important for an analysis of the level of public welfare and living standards in the region;

- gross capital formation, which reflects changes in nonfinancial assets (fixed capital, inventories and other tangibles) occurring in the process of production;
- generation of income account (compensation of employees, net taxes on production, gross profit in the economy and gross mixed incomes), which reflects the payment and receipt of primary incomes by resident institutional units directly involved in the production of goods and services.

All these indicators perform the functions of key measures of socioeconomic development, and their comparison per head of the population for different regions makes it possible to obtain a comparative picture of the state of the economy in a given region. But the central place belongs to GRP, which shows the final result of production activity in the region in the form of the gross value of all products and services (including intangibles) produced in a given calendar period net of the value of intermediate consumption.

Let us emphasize that in terms of economic content the gross regional product is analogous to the gross domestic product, which "measures the aggregate value of final goods and services produced in the territory of a given country at market prices. In physical terms, GDP is the aggregate of objects and services used during a given year for consumption and accumulation."²

In the conditions of open administrative borders and information constraints, interregional exchange is reflected in regional statistics far from fully, so that some components of GDP (which are very difficult to assess) are not included in GRP. Among these are:

- value added by nonmarket collective consumption services provided to society as a whole (national defense, Federal government, law enforcement and international activities, environmental protection, hydrometeorology, cartography and geodesy, prevention and liquidation of emergency situations and of the consequences of natural disasters, public debt servicing, replenishment of government stocks and reserves, economic mobilization, holding elections and referendums, financial support of territories, etc.) or services on which there are no data;
- value added by the services of financial intermediaries (banks, investment funds, exchanges, etc.) whose activities are not confined to particular regions;
- value added by foreign trade services calculated only at Federal level (amount of export and import taxes), because in view of the specifics of tax accounting it is impossible to specify the exact amount of these taxes for each particular region.

These GDP components are distributed between the regions in proportion to the size of the population in each RF constituencies. In view of that, it is so far impossible to achieve a balance between GDP and GRP indicators.

Without going into the details of GRP calculation, let us merely note that it is traditionally estimated, as a rule, with the use of two methods. Under the so-called production method, it is calculated as the difference between the sum of outputs in all branches of the economy and the sum of intermediate consumption. Under the final use method, GRP is calculated as the sum of expenditures of all economic sectors on final consumption, gross capital formation and net exports (exclusive of imports).

As a macroeconomic aggregate, gross regional product can be used to determine the amount of tax revenue going into the budgets of all levels and the key indicators measuring the quality of life in the region (income, consumption, savings) and to assess the pattern of economic growth, short-term market fluctuations and real changes in the structure of production. The other indicators listed above and constituting part of the system of national accounts can be used to analyze the movement of labor productivity and efficiency in the use of economic resources and other factors affecting the efficiency of social production. GRP is measured in volume and value terms. Its value is assessed with the use of two kinds of prices: current and constant.

Conversion of GRP and its components from current (market) prices into constant prices is one of the central tasks in GRP statistics, helping to obtain reliable and comparable results for different periods

² See: Bol'shoi entsiklopedicheskiy slovar, 2nd edition, Moscow, 2000, p. 176.

of time. This is particularly important in the conditions of continued and relatively high inflation, which has so far resisted all attempts to bring it to a halt. Apart from inflation, one should also take into account the purchasing power of the ruble in different regions, which makes it possible to specify the weight of GRP per capita in a particular RF constituencies. The higher the purchasing power of the ruble in this administrative entity, the relatively greater is the amount of goods and services per given volume of per capita GRP.

Let us note that statistics distinguishes between nominal GRP calculated at current prices and real GRP, which is the physical volume of production of goods and services calculated at the prices of the preceding period, i.e., at constant prices. If the general level of market prices in the current period has gone up, real GRP will be lower than nominal GRP, and if it has gone down, real GRP will be higher. In order to convert the gross regional product from current prices into constant prices, socioeconomic statistics recommends such methods as deflation (with the use of price indices) and extrapolation of base period figures over time (with the use of the volume index), and also the method of quantity revaluation.

The advisability of using current or constant prices depends on the purpose of the computations being carried out. One should always bear this in mind, because in practical computations analysts often commit a methodological error, measuring GRP movement over time not at constant but at current prices (without adjustment for inflation). This markedly distorts the computations and, as a rule, leads to erroneous conclusions. Here is an example to illustrate this point (see Table 2).

As the table shows, over the past seven years the nominal gross regional product rose from 6,019.3 billion non-redenominated rubles to 42,560.5 million redenominated rubles, i.e., by more than seven times, and nominal GRP per capita by 6.6 times. If that is really so, the task of doubling GDP/GRP over the next ten years, as formulated by Russia's President Vladimir Putin, must be easy to achieve. But then one may ask: why should the head of state set such an easy task before the country? In actual fact, a real doubling of GDP/GRP in such a short period is a sufficiently complicated task, since the doubling has to be achieved not at current prices (which have been growing annually by leaps and bounds, so that produced GDP is artificially overvalued), but at constant (comparable) prices adjusted for inflation by means of a deflator and tied to a definite base period. And that is not the same thing at all. If we take a look at Table 3, obtained from Table 2 by converting GRP from current to constant prices, we shall find a totally different picture.

Table 2

Volume and Dynamics of Daghestan's Nominal Gross Regional Product for 1996-2002

(at current prices)

	1996	1997	1998	1999	2000	2001	2002	Increase from 1996 (times)
Total GRP, million rubles (prior to 1998, billion rubles)	6,019.3	8,636.1	8,494.2	13,243.4	21,327.9	31,507.9	42,560.5	7.07
Per capita GRP, rubles (prior to 1998, thousand rubles)	2,925.3	4,143.8	4,030.5	6,203.9	9,885.0	14,479.7	19,400.0	6.63
GRP growth, change from previous year (times)	1.0	1.43	0.98	1.56	1.61	1.48	1.35	7.03

Table 3

Dynamics of Daghestan's Real GRP for 1996-2001 (at comparable prices, % of previous year)

	1996	1997	1998	1999	2000	2001	Increase from 1996 (times)
GRP, %	100	100.9	91.9	104.8	115.0	127.9	138.0

As we see, GRP growth in constant price terms is much slower and the resultant increase is not as impressive. Whereas at current prices GRP in 2002 was seven times higher than in 1996, over the past six years the real increase at constant prices was only 1.38 times. These data were taken from official statistical sources and are available to the public (see: *Statistical Yearbook Daghestan-2001*). But a correction of methodological errors is only one of the ways of closing the gap between estimated and actual GRP during the calendar period in question. An equally important condition of an objective and adequate assessment is to take due account of the results of the census carried out in Daghestan in 2002, which showed a significant increase in the size of the population, a fact that is bound to reduce the figure for per capita GRP, so lowering the living standard in the republic.

Other factors affecting GRP growth rates and volumes include transfers, subsidies and subventions from the Federal Center designed to cover the republic's budget deficit, which play a significant part in the budget structure. Federal assistance accounts for an average of 80% of Daghestan's consolidated budget revenue, amounting to 30% of GRP (in 2001, such assistance stood at 9 billion rubles with GRP at 31.5 billion rubles). Sooner or later these funds will have to be replaced by an increase in output in the republic, with the result that its GRP could "lose" another 30% or so. In other words, there is certainly no simple solution to the problem of doubling the republic's real GRP by 2010.

What is the "Cost" of Doubling GRP within the Decade?

As noted above, a doubling of GDP in Russia and GRP in Daghestan will not reduce the republic's lag in economic development behind the national average. In order to narrow the gap, the republic's GRP will have to grow faster than GDP for the country as a whole. This means that over the next 10 years it is necessary, at the very least, to lay the groundwork for a self-sufficient economy in the republic, i.e., an economy where subsidies constitute no more than 40% of the budget. According to estimates given in a collective monograph entitled *Perspektivy razvitia Dagestanskoi ekonomiki v XXI veke* (Prospects for the Development of Daghestan's Economy in the 21st Century), in order to accomplish this task we need to increase the republic's GRP by 2010 to \$1,000-\$1,200 per capita (in 2001, the figure was \$316). In other words, not to double but at least to treble it.

Daghestan has the internal reserves for such an increase in GRP: its economic and production potential is quite sufficient to treble or even to quadruple the gross regional product within the decade. However, this implies the need to restart currently idle production capacities, utilize investment resources and enhance the efficiency of economic administration and management. The greatest contribution here could be made by the fuel and energy complex, which can ensure an increase in GRP by 2010 in the amount of \$187 per capita; industry (by \$125.5); and agriculture (\$53.1). A substantial increase can also be obtained by attracting the investment resources of households ((\$164.2) and of credit institutions (\$128.9).

New Horizons of Daghestan's Economic Development

However, these measures are only temporary. They are engendered not by the activation of new growth mechanisms, but by the background effects of the "post-devaluation recovery" in the economy after the default in August 1998. That is why by the turn of the decade it is necessary to create real conditions for sustained long-term growth of GRP. This can be achieved by a structural and institutional adjustment of the economy

through efforts to develop progressive high technology lines of production, build up capacity in the electric power complex, bring on stream promising oil and gas fields, tap alternative sources of energy (wind, solar and geothermal), make more efficient use of the republic's recreation potential, etc.

At the early stages of transition to a market economy, structural and institutional changes were confined to the development of various forms of property (as a condition for the emergence of market relations) and the establishment of an appropriate infrastructure (as the basis for activating market regulation mechanisms), whereas today the problems of restructuring are connected with the need to overcome the organizational deficiencies of the production structure, which has so far failed to adjust to the constantly changing market environment. The need to restructure the republic's entire economic system is also due to the following circumstances:

- the first 10 years of reform (1992-2002) did not result in the emergence of a single, integrated economic complex. In effect, the republic's economy is still a conglomerate of unconnected enterprises in different industries which are either raw materials or functional appendages of the respective Federal industries. Such an irrational and inflexible structure cannot ensure effective servicing of a modern diversified market;
- low product quality sharply reduces the competitiveness of the regional economy and slows down its development;
- the economy's poor responsiveness to the demands of the population has resulted in a state of affairs where external expansion has multiplied imports far in excess of exports and has come to dominate the consumer market, creating a threat to the republic's economic security;
- the problem of employment among the local population, which has worsened to an extreme, and many other unresolved social problems are among the causes of continued social tension in society.

In view of these factors, structural adjustment should be carried out so as to create a multifunctional, competitive and open economy consisting of a coherent, flexible and hierarchical system of industries capable of quickly adjusting to the constantly changing demands of the market and oriented toward sustainable growth and higher living standards in Daghestan. These include the following groups of industries: sunrise ("breakthrough"), core, vital ("background"), auxiliary and local.

Sunrise industries (industries of the future) should ensure the region's large-scale presence on the national market and determine its export potential. The main criteria for their selection include reliance on advanced scientific and technical achievements and, accordingly, a high share of value added in the final product. These components can enable the region to achieve the required competitiveness in the conditions of maximum economic openness.

The selection of a set of sunrise industries is the most complicated task and should take into account the general trends and prospects in the development of high technology lines of production at the national level, the competitive advantages of the region, the existence and development potential of its research infrastructure, and various other conditions. For Daghestan, such industries could include biotechnology and the production of medicinal preparations from local plants and minerals; comprehensive use of the resources of the Caspian, including recovery of valuable constituents from sea water; development of up-to-date lines of production for processing highly mineralized geothermal waters rich in cadmium, strontium and other rare earth metals; use of alternative sources of energy; construction of precision instrument making and electrical engineering plants, and others. In order to utilize the excess labor in the republic, it would make sense to establish a network of assembly plants for producing personal computers, microchips, etc.

Core industries determine the specialization of the RF constituencies in the domestic market. These include, in the first place, the food and light industries, metalworking and a number of other traditional industries long present in the republic's economy.

Among the vital industries one could include sectors which use natural resources and whose output is far in excess of the republic's own needs (oil and gas, electric power). Their life supporting function primarily consists in raising funds for the republic's budget, which could be used to create a kind of investment reserve for promoting the development of sunrise and core industries.

Auxiliary industries are meant to perform purely production functions: to supply enterprises in the above industries with raw and other materials (metallurgy, petrochemical industry, development of min-

eral deposits) and with packaging (woodworking and glass industries), and also to meet the demand of the regional market for certain goods (building materials, light industry, etc.).

Industries of local importance include numerous cottage industries: carpet weaving, production of jewelry, national costumes, rare weapons, other works of art, etc.

This classification should not be regarded as something static. Some of the listed industries can change their status over time and depending on the concrete economic conditions.

Structural adjustment in the region, just as the technical reequipment of industries, will obviously require close financial, organizational and informational interaction between Federal and republican budgets, agencies and organizations. Thus, large-scale deployment of sunrise industries in the territory of Daghestan is simply impossible without active support from the Center. In this case, it is not only a problem of increasing intergovernmental transfers and other kinds of financial assistance, but also of larger subsidies for the republic's enterprises. What we need here, in all probability, is centralized procurement abroad of the appropriate technology, know-how and some kinds of equipment. Such an approach implies the need to draw up and implement a special regional program for the development of the high technology sector.

As regards the other industries listed above, we suggest the following principle: the lower their hierarchical importance in the regional structure, the lower should be the degree of Federal participation, which should give way to market mechanisms of economic activity.

Regional restructuring will require certain financial support. As noted above, this could be provided, in particular, by "background" and to some extent by core industries. It goes without saying that the private sector will also be affected, primarily through changes in the proportions of distribution of income from the exploitation of natural resources. In the field of hydrocarbon materials, this income is now distributed between private companies and the Federal and regional budgets roughly in the proportion of 65:27:8. Such a level of accumulation of rent on subsoil assets in the budgets of RF constituencies cannot provide a basis for the establishment of funds designed to finance regional economic restructuring. In this connection, the share of revenue from the exploitation of mineral resources should be changed in favor of the regions.

Another opportunity for solving this problem is connected with an expansion of the scope of activity of energy companies so as to draw into their orbit various sunrise and core industries by using diverse incentives and privileges, including those applied in world practice. This could help to somewhat even out the rate of return in industries at various "tiers" of the economy and to create prerequisites for restructuring companies operating in the primary sector, including the formation of horizontally integrated production and business structures, which are relatively new to Russia. Such structures should help to ensure a more or less free movement of capital from industries with a relative excess of capital (fuel and energy) to sunrise, core and auxiliary industries, which are badly in need of investment.

Conclusions

In summing up the above, one can draw the conclusion that priority in the development of a strategy for doubling GRP should be given not to quantitative but to qualitative, stable and long-term economic growth that would really serve to augment the wealth of the republic and the country as a whole. This can be done not so much by raising prices as by ensuring a steady increase in the production of high-quality goods and services in strict accordance with the society's reasonable needs and based on balanced prices. In short, by ensuring all that is covered by a single concept: sustainable economic development. Naturally, the general conceptual approaches outlined above will have to be further developed and specified. Another obvious problem is their practical implementation, which will only be possible if the proposed lines of upgrading the structure of the regional economy are reflected in appropriate decisions by the republic's legislative and executive bodies. All these factors must be taken into account in developing a long-term structural policy for Daghestan.