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## **SYSTEM OF INDICATORS OF THE STATE OF AGRICULTURE IN THE REGION IN THE CONTEXT OF A MARKET ECONOMY IN TRANSITION**

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## **System of Indicators of the State of Agriculture in the Region in the Context of a Market Economy in Transition**

1. Agriculture is a broad and vitally important sector of the economy which meets the population's needs for food as well as industry's needs for raw materials. It occupies a significant place in the sphere of material production.
2. The crisis in the agricultural economy, the fall in output of agricultural produce and food and the low level of efficiency in agro-industrial production stem from the difficult socio-economic situation in the country, marked by erratic output and economic relationships, the loss of State control over prices and wages, inflation, the higher cost of credit, a drop in the purchasing power of agricultural producers, uncompetitive Russian output on the world market, an inadequate legal framework, etc.
3. Economic and financial stability cannot be achieved in agriculture at the present stage if the State does not take steps to remedy the crisis. Avenues to be followed to lead the agricultural economy out of the crisis are outlined in the Russian Government's decision No. 360 of 31 March 1997 on structural reform and economic growth in the period 1997-2000 and the Federal Programme for Stabilization and Development of Agro-Industrial Production in the Russian Federation over the period 1996-2000. Corresponding decisions have been adopted in Moscow oblast.
4. The main provisions of these decisions are designed to raise agricultural output and mould a new institutional, sectoral and regional structure for the agricultural sector in order to meet food and agricultural raw material requirements through stepped-up production, the harnessing of the achievements of scientific and technical progress, revival of the productive potential of agriculture and the processing sector, cooperation, efficient entrepreneurship and adaptation to market conditions. The major yardsticks for judging progress are indicators of efficiency and mechanization.
5. The principal source of economic information on all phenomena and processes occurring in this complex sector in the course of the reform is, as in the past, agricultural statistics.
6. The most important element in the implementation of the programme to reform statistical activities at the current stage is the development of a system of indicators which reflect as fully as possible the processes under way in the region, which correspond to market conditions and which reflect the progress and the outcome of the ongoing reforms.
7. The system of indicators of the state of agriculture in the context of a market economy in transition must be the foundation for meeting the information requirements of official bodies at all levels, economic agents and the population at large, and for conducting a comprehensive economic and statistical analysis of the socio-economic situation in the area.
8. In general the system of indicators of the state of agriculture at the present stage takes the form of two independent but interlinked levels: the macro level and the micro level.

### **The macro level**

9. Agriculture is one of the most important sectors of the economy of any region. First and foremost the place or significance of agriculture in a region's economic structure must be defined. Trends in the socio-economic development of a region are defined primarily by means of the following indicators.

**The share of agriculture in GDP, the number of persons employed, the value of fixed capital and capital investment.**

Agricultural output is the central element in the agro-industrial complex.

10. Agricultural reform is aimed at the comprehensive restructuring of agricultural production on the basis of a variety of forms of management and of ownership of land and other means of production, the creation of a competitive environment in the agro-industrial complex and the expansion of the agricultural market.

11. In this context the creation of a mixed economy in the branches of the agro-industrial complex is one of the most important elements of the agricultural reform.

### **Institutional changes**

12. During the institutional and land reform in agriculture, the foundations of a mixed economy have been laid down, focused on four sectors:

1. State sector
2. New organizational forms  
(partnerships, joint-stock companies,  
cooperatives, etc.)
3. Peasant farms
4. Individual plots.

13. The economic reforms initiated after 1990 have made it possible to lay the foundations of a mixed economy and carry out land reforms.

14. Substantial changes have occurred in the structure of agricultural producers during the ongoing agricultural reform. The predominant form of management is now to be found in enterprises with new organizational and legal forms: partnerships of various kinds, agricultural cooperatives, subsidiaries of industrial, transport and other enterprises and organizations. The role of the State sector in the agricultural economy has been sharply reduced. More than 6,000 peasant farms have been set up and have entered into operation. The importance of private ancillary plots has grown. The rights and powers of agricultural producers have been appreciably extended. Enterprises, whatever their organizational and legal form, can freely dispose of what they produce, and determine the direction, structure and volume of production.

15. Less than 16 per cent of agricultural land is in the hands of State enterprises. The remainder of the land has been transferred to non-State agricultural enterprises as far as occupation, use and private ownership are concerned. The total area under crops in agricultural enterprises has diminished. Fodder crops, grain crops, potatoes and vegetables predominate in these areas.

16. In the areas under crops in peasant farms perennial grasses, grain crops and potatoes predominate. Peasant farms do not exert a significant influence on the food situation in the oblast.

17. The small-scale sector of private ancillary plots has been expanding in recent years as a result of the transfer of land to individual plots and market gardening partnerships.

18. As numbers of the main types of livestock in agricultural enterprises have fallen, there has been a tendency for the numbers in individual plots to rise.

19. Of major significance among the measures taken to implement the reform is the creation of a market system for the sale of output produced by the agro-industrial complex. In this

context, the system of indicators should cover **structural changes in the disposal of production** (procurement agencies, consumer cooperatives, independent markets, etc.).

20. Stabilization and revival of economic growth in agriculture between now and the year 2000 must be effected (in pursuance of official decisions) on the basis of a **shift from predominantly extensive to intensive, low-input technologies and forms of production**.

21. Of great importance in the system of indicators for analysing the development of agriculture is **the status of the production potential** of the sector (indicators of fixed assets per employee and provision of fixed assets, measured in terms of the quantity of agricultural fixed assets in the material sphere per worker and per 100 hectares of agricultural land, respectively); **the share of productive assets in total fixed assets in agriculture**, including the share in each branch (crop farming, livestock raising), and the share of machinery and equipment in the structure of fixed assets in the material sphere.

22. Of great importance are indicators of the **level of all-round mechanization** in the subsectors of agricultural production with the most demanding schedules, namely potato growing, vegetable growing and cattle raising.

23. Proper observance of the schedules for cultivating many agricultural crops and the timetables for field operations are well illustrated by the indicator **level of equipment in farms (per cent)**, taking seasonal operations into account.

#### **Investment in agriculture, including investment in construction for production purposes**

24. During the period of agricultural reform, investment policy is based on combining consistent decentralization of the investment process - primarily by raising the profitability of commodity producers and enhancing the role played in their activities by internal investment - with State funding of the development of the agricultural complex.

25. In the investment section of the system of indicators, provision must be made for the following sources of funding:

Budgetary resources (covering all levels);

Investment credit, highlighting projects being financed on a competitive basis;

Commercial banks' long-term credits secured on immovable property and land (mortgage loans);

Resources of enterprises in other sectors, private and foreign investors;

Reimbursements of credit granted for leasing purposes, subject to indexation, and additional budgetary funds on a reimbursable basis;

Investment in social restructuring in rural areas (creation of a complex of enterprises and organizations providing social and communal services to the population, technical infrastructure, and also provision of services in rural population centres, including electric power, gas, telephones, roads and housing).

## **Financial situation**

Total number of agricultural enterprises;  
Financial results of the activities of agricultural enterprises;  
Number of loss-making agricultural enterprises;  
Accounts receivable;  
Accounts payable;  
Amounts owed on credits and loans received;  
Material costs;  
Balance-sheet losses and losses on production and sales;  
Wage arrears;  
Costs of goods and profitability ratio.

26. A qualitative indicator of the operating profit or loss is costs, i.e. that part of average production costs, expressed in money terms, which measures the enterprise's expenditure on means of production consumed and wages paid in producing one unit of a given product;

Level of profitability.

27. Evaluating the level of costs provides only a comparative indication of the qualitative result of the operation of enterprises individually or together, which reveal the factors involved. In the case of production it is necessary to know the loss or profit made on the sale of output - to define profitability. **Profitability is a key criterion** in assessing the level of efficiency of agricultural enterprises;

The amount and timeliness of financial inputs to agriculture from budgets at all levels.

## **Supply to the region's population of food products produced in the oblast or transported from other parts of Russia.**

28. Provision of food products per capita in accordance with recommended levels.

29. Share of imports in the total volume of the main food products, including:

Meat and meat products;

Milk and dairy products;

Vegetable oil;

Sugar.

Share of imports in the volume of foodstuffs.

Proportion of foodstuffs leaving the area, including exports.

### **Availability of inputs for agriculture**

30. Sustained output of agricultural production during the reform stage is envisaged thanks to the better use of inputs based on the more efficient harnessing of labour, material and energy resources, the biological potential offered by the yields of the latest plant varieties, and agro-ecological resources.

31. At the same time, it is not possible to make better use of inputs in agricultural production unless the availability of inputs in the sector is improved.

32. The most significant indicators are:

Fertility of the land (systems using mineral and organic fertilizers, material containing lime, use of new-generation cultivation systems - systems of cultivation taking landscape considerations into account);

The state of pedigree stock breeding, the share of specialist farms, the development of feed production with the aim of eliminating the protein imbalance in feed rations for animals;

The state of seed growing.

### **Development of capital-generating sectors**

33. The stabilization and development of agriculture are primarily dependent on the provision of modern equipment, the renewal of the materials and technical base, the conversion of plants manufacturing agricultural machinery, the active involvement of military enterprises converted to civilian use and other capital-generating sectors. In this context it is vital to monitor technical policy and the restructuring of the machine construction sector.

### **Consumption of energy resources**

34. The supply and economical use of energy resources are of the utmost importance in the restructuring of agricultural production:

Aggregate consumption of energy resources in various parts of the agro-industrial complex;

Energy use per employee;

Per capita electric power consumption.

### **The micro level**

35. This level allows for detailed consideration of the production and sale of agricultural output in and outside the region.

The principal indicators are:

Output of agricultural produce in all types of farm (including crop farming and livestock raising) and by category of farm in actual and comparative terms, taking into account the index of the volume of agricultural production;

Availability of land and land distribution by category, type and user;  
Production of the main types of agricultural products in farms of all kinds (by type), including production by category of farm;  
Volume of deliveries to State food stocks (by type);  
Areas under crops and total harvests of agricultural crops;  
Yield of grain crops;  
Number of livestock and poultry;  
Number of main types of livestock and poultry sold for slaughter;  
Milk and egg production;  
Transport of agricultural produce outside the oblast, including transport to Moscow;  
Stocks and deliveries of fuel (diesel fuel, petrol);  
Availability of agricultural equipment, including equipment in working order.

36. It should be noted that the system of agricultural indicators earmarked for monitoring and analysis is currently spread over a very large number of statistical observation forms.

37. At the same time, the requirements relating to analysis of processes occurring in agriculture during the period of reform of this sector prompt reflection on the need to integrate the forms used for statistical reporting, which will make it possible to conduct agricultural monitoring speedily in a homogeneous group of farms.

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