Should Agricultural Statistics Be Responsibility Of National Statistics Services Or Ministries Of Agriculture?

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Abstract: Today in Russia, data collection responsibilities are distributed between the Russian State Statistics Service (Rosstat), the Russian Ministry of Agriculture, and other institutions that have the authority to gather statistics. Rosstat collects data on the key sectors of agricultural development. The Russian Ministry of Agriculture collects data from the Russian Federation territorial administrative offices of the Agri-Industrial Complex and from the organizations subordinate to the Ministry. By law, the Russian Ministry of Agriculture is a customer and coordinator of the federal informational resources in agriculture.

A recent joint effort between the Russian Ministry of Agriculture, Rosstat and the Russian Real Estate Agency aimed at processing and analyzing data from the 2006 Russian Agricultural Census was a positive experience. At the moment, our current practice is such that agricultural statistics is a responsibility shared by both the Russian State Statistics Service and the Ministry of Agriculture according to their respective authorities.

1. Statistical System in Russia

The Russian Ministry of Agriculture does not include in its structure an independent agricultural statistics service.

Thus, the agricultural statistics is collected and used in the following way:

The Russian State Statistics Service – Rosstat—collects data on key sectors of agricultural development. This includes information from agricultural enterprises, agricultural producers, and private farms. This office is also in charge of collecting periodic accounting reports.

In addition to the statistics agency, economic data on agricultural producers and people's households is gathered by the tax authorities and insurance companies. The Federal Customs Service generates customs statistics.

The Russian Ministry of Agriculture collects data from the territorial administrative Agri-Industrial Complex departments of the Russian Federation, and from the organizations subordinate to the Ministry. Mainly, this is operative information that relates to the status of the federal and target-specific programs (for example, the Federal Rural Social Development Program), price monitoring, and customs statistics. The farmland remote sensing allows to forecast crop yields and monitor crops throughout the vegetation season.

In accordance with the Federal Law "On General Principles for the Local Governance in the Russian Federation", statistics maintenance has become a responsibility of municipal institutions, i.e. they have received the right to gather statistical reports.

Thus, various federal and municipal entities have different authorities where it relates to statistical and operative agricultural data collection.

It is quite obvious that there is a need to integrate such data.

Information collected from different sources should not be redundant but complementary.

That is why the Russian Ministry of Agriculture is a customer and coordinator of the federal informational resources in agriculture. Correspondingly, federal resources require common terminology, unified access to the resources and so on.

An important factor, without which it is not possible to manage the federal informational resources in the farm industry, is a common approach to building and maintaining the Agri-Industrial Complex referenced data system.

Currently, the work is underway to maintain the entire referenced data of the Agri-Industrial Complex in accordance with the informational integrity principle. To reach that goal, we are introducing classifiers and providing Internet access, we are also developing the agricultural statistics meta database.

Metadata services the informational resources by tracing and updating every change. The results of this activity will be published on a web site and open to any interested party. We are developing the intercommunication system with the regions; i.e. a set of directives and guidelines for supporting the referenced data. In the long run, we need to address the issue of making our statistics and reports comprehensible and available.

2. Inter-agency Collaboration

Currently, the Russian Ministry of Agriculture and Rosstat generated some positive joint experience in working together with data processing and analysis. The Russian Federation Government Commission for the Agri-Industrial and Fish Complex is in charge of the interagency exchange.

The systematic work includes:

- working with the master plan in accordance with the Technical Assignment developed by the Economic Analysis Bureau, the Federal Rosstat, and the World Bank. This work is important to reform the Russian statistics system. Changes related to the database and metadata were introduced in the master plan;
- development of methods to support the Agricultural Producers General Universe to conduct sample surveys in between census periods;
- activities under the Federal Program "Development of the State Statistics in Russia in 2007-2011".

3. All-Russian Agricultural Census

On a practical level of the interagency exchange, an important achievement was the All-Russian Agricultural Census carried out by Rosstat in 2006, where territorial offices of the Federal Land-Survey Real Estate Agency and the Ministry of Agriculture were involved. It has to be mentioned that the customer of the census was the Russian Ministry of Agriculture.

The key goal of the All-Russian 2006 Census was to receive complete and unbiased information on the major characteristics of the Russian agriculture. This will allow the government to use the available budget in a better way, to pursue price policy effectively, to support domestic producers stronger, and to offer better social benefits to the rural population. Today, the census database is under development. As soon as the work is over it will be passed over to the Ministry of Agriculture (without personal identification option).

Updated lists of agricultural producers were generated during the All-Russian Agricultural Census, which in itself is an important outcome.

Thus, in accordance with the operative census data agricultural producers were identified missing from the industry's registers or administrative sources, including 5,4% of individual entrepreneurs, 1,4% of small agricultural enterprises, and 1% of large and medium organizations. The updated figures will allow to create a new general universe to conduct sample surveys of agricultural producers.

At the moment, the census data is being processed at the interagency level.

The Atlas of Russia will be published to demonstrate the census results in the context of administrative territories, rayons and municipalities of the Russian Federation supported by the corresponding census theme maps. Here is where we are using the geoinformational technologies quite extensively.

The census summary maps will display the aggregated results for farmlands, crops, and livestock, for example cattle numbers visualized by rayons.

Maps generated on the level of municipalities will make informational coverage of natural and utility facilities on their territory complete and clear, which will help municipal administrations to improve the efficiency of their governance including data collection being one of the functions.

4. State Information System of the Russian Agriculture

All agricultural statistics will be stored in the Uniform Information Security System of the Russian Agri-Industrial Complex as the federal informational resources in accordance with the Federal Agriculture Development Program.

The Federal Program was confirmed by the Russian Federation Government Resolution to follow up on the implementation of the Federal Law on Agriculture Development adopted in 2006.

Creation of the Uniform Information Security System pursues two major goals:

- 1. Raising the competitiveness of the Agri-Industrial Complex based on offering electronic services to agricultural producers and rural population;
- 2. Improving the management efficiency in the farm industry and food market regulation policies on the basis of modern informational technologies.

It would be logical here to talk in some greater details about certain components of the Uniform Information Security System that ensures informational support to the resources containing statistics.

4.1 Automated Informational System of the Russian Ministry of Agriculture

The Automated Informational System of the Russian Ministry of Agriculture ensures informational support to the Russian Ministry of Agriculture, the Veterinary and Phytosanitary Surveillance Service, the farm industry management processes, production and food market regulation policies.

Functionally, the system is designed to provide the top management and specialists of the Ministry with authentic day-to-day reports concerning the results of the situation evaluation and analysis as well as informational support to make decisions in favor of the industry.

The system relies on a large number of databases and the data warehouse.

We already mentioned the need to develop a common approach to developing and maintaining the referenced data and Agri-Industrial Complex figures.

Practical implementation of such approach is a process that includes industry's classifiers and statistics generated by the Russian Ministry of Agriculture, Rosstat statistics and classifiers, all-Russian and international classifiers. All of the above has been integrated under the AGROSIS industrial system.

Agricultural enterprises of various types of ownership have been reoriented towards market economy throughout the years of our economic reforms. Government authorities of the Russian Agri-Industrial Complex transformed from the command-regulatory force into the authority for indicative planning and market regulating. In this environment, every agricultural enterprise and agricultural government entity, in order to do a better job needs updated, complete, accurate and diversified information on the farm markets, market statistics and price monitoring.

4.2 The Russian Agri-Industrial Complex Market Information System

The Russian Agri-Industrial Complex Market Information System must provide for collection, processing, handling and presenting the market information for the population and participants of the farm and food market.

Summary market reports are distributed on paper and electronically. Reports are put out on the Ministry's web site of the Market Information Center. Same web site is used for analytical materials.

Analysis of the rural development trends, rural infrastructure improvement, agricultural production development demonstrate that we are still not capable to resolve issues related to crop forecasting (given the necessary accuracy), we do not have maps of crops lost, soil erosion and land salinity. Farmland use monitoring is yet to be addressed. We need statistics that would reflect the results of long-term observations – changes in the environment, and yield monitoring data.

4.3 Farmland Remote Monitoring System

The Farmland Remote Monitoring System is designed to address specific objectives such as cropland monitoring, yield forecasting supported by remote sensing data. The system offers instruments for unbiased control of the accuracy of statistics reports. Space monitoring addresses an issue of the farmland use and improves the yield-forecast accuracy.

5. Conclusion

Let me emphasize one more time that every component of the Uniform Information Security System of the Russian Agri-Industrial Complex provides for the Russian Ministry of Agriculture the opportunities to collect and process operative data and statistics generated throughout the interagency exchange.

At the moment, our current practice is such that agricultural statistics is a responsibility shared by both the National Statistics Service and the Ministry of Agriculture according to their respective authorities.