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**Global initiatives: Integration of agricultural statistics
into national statistical systems**

Integration of agricultural statistics into the National Statistical System[1]

Current situation

In Kazakhstan, the majority of officially published statistical indicators characterizing the state and development of agriculture are formed by an authorized body in the field of statistics, the Agency of Statistics of the Republic of Kazakhstan (ARKS). Apart from nationwide statistics, there is a departmental statistics, which is formed by the Ministry of Agriculture and the Land Resources Management Agency of the Republic of Kazakhstan, and also administrative source – the data of household accounting, which is formed by administrations (akimats) of townships, villages (auls) and rural counties.

There is a close interaction between all state bodies within the system of agricultural statistics. The ARKS forms all basic agricultural indicators by conducting nationwide statistical observations and using administrative data sources. Departmental agricultural statistics is mainly formed for the use by the ministries and agencies which develop it, in order to study selected industries more specifically and plan their development. For example, the Ministry of Agriculture conducts departmental statistical observations on thoroughbred livestock breeding and veterinary. Obtained data is used by the Ministry and is not published officially.

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Today, the ARKS monitors the following groups of statistical indicators:

- presence of agricultural inputs by type (number of livestock and poultry, acreage, agricultural buildings and equipment);
- volume of production in agriculture, forestry and fishery by types;
- volume of services rendered in the field of agriculture, forestry and fishery by types in terms of value;
- the expenditures on agricultural production by types.

The data is collected in all categories of farms engaged in agricultural production and services. Among them there are agricultural enterprises, peasant farms and farms of ordinary population. Statistical observations are conducted on the basis of the Statistical Register of Agricultural Organizations, which was created in 1995 with the methodological help of statistics experts from the U.S. Department of Agriculture and the technical assistance of TACIS program experts. This register includes all these categories of agricultural producers.

Agricultural enterprises are covered by a general statistical reporting on a monthly, quarterly and annually periodicity. To obtain data on peasant farms and farms of ordinary population, a data of general farms accounting (Households accounting books and Peasant farms accounting books) which is realized by administrations (akimats) of rural counties is used. The farms accounting data contain complete information on the number of existing livestock and poultry and the area of acreage in these categories of farms. To determine the volume of agricultural production in the peasant farms and farms of ordinary population, sample statistical observations (30% and 5% of the total, correspondingly) with semi annual and annual intervals are conducted.

At the request of the Ministry of Agriculture, since 2006, in order to monitor the development of medium and large producers in livestock breeding, the peasant farms which belong to this category are surveyed on a general basis. Lists of such peasant farms in each region are determined by the Ministry of Agriculture and agreed with the ARKS on a regional level. Since 2011, at the request of the Ministry of Agriculture, it is planned to survey on a general basis also the peasant farms which belong to the category of medium and large producers in plant breeding.

Agricultural enterprises and peasant farms which belong to the category of medium and large agricultural producers submit reports (on paper) to local statistical bodies personally or by mail. To collect data in remaining peasant farms and farms of ordinary population, specialist (or interviewer) of the regional statistics department visits farms selected for a sample. Paper questionnaires are filled out by the respondent or by the interviewer with the words of the respondent.

Processing of primary data and formation of indicators are carried out by the Republican State Enterprise "Information Computing Center of the ARKS" in the local software systems for each statistical observation.

Data generated in the result of agricultural statistics observations are used in three main areas:

- calculation of macroindicators of the SNA;
- for internal users (state bodies and others);
- to complete international questionnaires.

The main summary indicator of agricultural statistics, which is then used in forming the SNA macroindicators, is the gross output of products (services) in agriculture, forestry and fishery industries, which is calculated for each region separately and for the whole country under the approved methodology. Gross output and indices of physical volume are formed on a monthly and annual basis. Due to the fact that the indicators for plant breeding are monitored once a year, and in livestock breeding only a part of agricultural producers is covered by regular monthly observations, for the monthly formation of a complete picture on all categories of farms the indicators for missing categories are formed by calculations in accordance with the approved technique.

Problematic issues

Currently, the agricultural statistics reports are not collected in electronic format. Significant amount of time and resources is spent on collecting and processing the primary data of sample observations of peasant farms and farms of ordinary population. During these observations due to tight deadlines and need for personal visiting of the households selected for a sample by a statistician, he is fully loaded with data collection and can not combine interviewing with other works. In order to solve this problem, the ARKS will make the scheme of collecting primary data on agricultural statistics multi-channel: in addition to traditional paper reports, the collection of data by telephone interviewing via call-center in the central office of ARKS and through the internet portal will be introduced.

Actual problem in recent years is the quality of the Register of Agricultural Organizations, which requires substantial upgrading and updating. The software currently used to generate samples for agriculture observations is outdated, which adversely affects the quality and time required to form samples.

There are some difficulties in implementing the tasks assigned to the national agricultural statistics by international statistical organizations. The key strategic directions for improving the quality of agricultural statistics were announced on the 40th and 41st sessions of the UN Statistical Commission. Working group on agriculture statistics proposed for discussion a set of basic indicators which should be formed by all countries.

Analysis of these indicators has shown that annual basic indicators, which must be formed first and foremost, are already formed by the ARKS, or present in administrative sources. Among them there are harvested area, production, productivity, export and import, stock, consumption for own needs, processing of major food crops, cotton and flax, similar figures on animal breeding and fishery production, and others. Among the basic indicators that should be formed with other intervals, the ARKS and administrative sources monitor the expenditures of agricultural organizations on forage, water, fertilizers, spare parts, the amount of spent forage, mineral and organic fertilizers, number of employed in agriculture, land distribution by type, area of irrigated land, indicators of water use and others.

For some indicators it is necessary to organize data collection or take other actions. For example, at the present time the data on subsidies, acreage, gross harvest of crops in irrigated and not irrigated lands, expenditures on land melioration and irrigation are not collected, there is no georeferencing in land use. Missing indicators will be gradually included in statistical observations. So, in 2011 questions on acreage, gross harvest and productivity of crops in irrigated lands will be added to the statistical form and will be monitored.

For further improvement of agricultural statistics the ARKS staff needs to study and adopt the experience of leading statistical offices; also, international analogues and methodical recommendations on determination of list of indicators should be used.

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