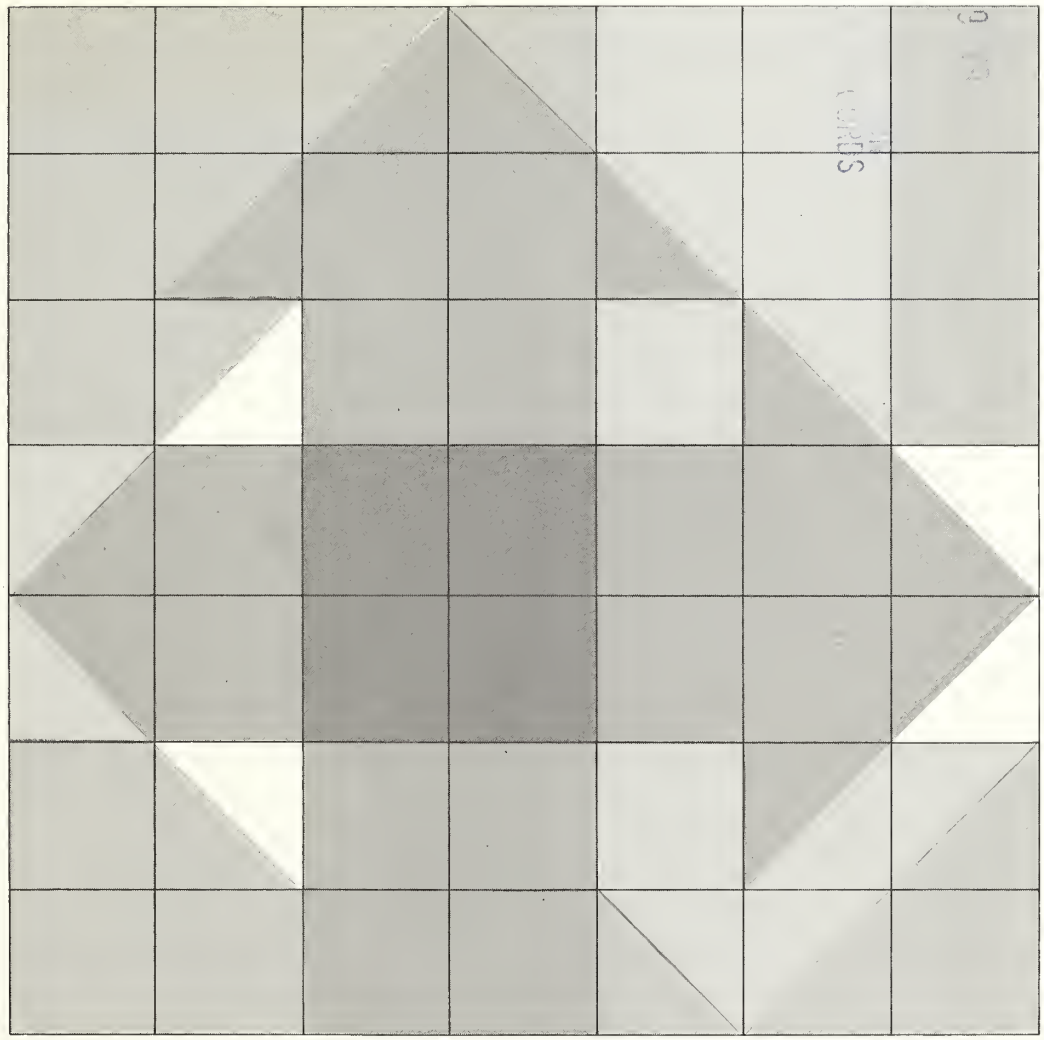
Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.

A281.9
AG8F
2 cop. 6

Collecting Agricultural Statistics in the Soviet Union

Report of Forecasting Project
US-USSR Agreement on Cooperation
in the Field of Agriculture



Economic Research Service
U.S. Department of Agriculture
Foreign Agricultural Economic Report No. 112

COLLECTING AGRICULTURAL STATISTICS IN THE SOVIET UNION, Report of Forecasting Project, US-USSR Agreement on Cooperation in the Field of Agriculture. By Fletcher Pope, Jr., Foreign Demand and Competition Division, Economic Research Service. Foreign Agricultural Report No. 112.

ABSTRACT

The Central Statistical Administration has primary responsibility for collecting and processing Soviet data, including agricultural data. All collective and state farms must provide required data according to a central, uniform plan. These data are used mainly by Soviet officials to evaluate progress in meeting planned goals. The recent change in grain import policy has greatly increased the need for Soviet officials to know about crop prospects during the growing season. Currently, work is underway in developing crop forecasting models.

KEY WORDS: Soviet Union, agriculture, statistics, forecasting.

Washington, D.C. 20250 November 1975

PREFACE

In June 1973, the United States and the Soviet Union initiated a U.S.-USSR Agreement on Cooperation in the Field of Agriculture. Under the agreement, a Joint Committee on Cooperation in Agriculture, composed of delegates and a chairman from each side, was established to implement the program of work. The committee is to meet once a year, alternating between the two countries.

Two groups established under the joint committee have primary responsibility for formulating the specific projects and work plans for the cooperative endeavors; the U.S.-USSR Working Group on Agricultural Research and Technological Development, and the U.S.-USSR Working Group on Agricultural Economic Research and Information. Delegates and a chairman from each side are scheduled to meet at least twice a year, also alternating between the two countries.

The working group on economic research and information comprises four project areas, which are defined as follows:

1. "Integration of branches of agribusiness complexes; organization and management of firms producing and processing agricultural products, including the use of methods of mathematical models."

2. "Elaboration of methods and procedure for data organization, analysis, forecasting, and forecast evaluation of the demand and production of major agricultural commodities."

3. "Exchange of agricultural economic information."

4. "Exchange of publications and materials by libraries and other information agencies."

Under the forecasting project--area two above--three forms of cooperation have been specified: (1) joint workshops, (2) exchange of scientific materials, and (3) exchange of specialist delegations. The first delegation under the forecasting project, consisting of four U.S. specialists, visited the USSR for about 30 days in August-September of 1974. The primary objective of this forecasting team was to study the organizational structure and methods of collecting, reporting, and analyzing data on agriculture in the Soviet Union. The following is a report on the forecasting team's findings.

CONTENTS

	Page
Summary	iii
Introduction	1
Soviet Statistical Organization	3
Organization of Statistical Work on Farms	5
Types of Data	7
Collecting, Processing, and Publishing Agricultural Data	8
Evaluation of Current Crop Prospects	11
U.S.-USSR Agricultural Statistical Systems Compared	13
Soviet Use of Agricultural Statistics	14
Accuracy of Soviet Agricultural Statistics	14
Personnel Working on Soviet Agricultural Statistics	16
Technological Developments in the Soviet Statistical System	16
Appendix	18

SUMMARY

The Soviet Union has devoted little attention in the past to estimating crop production prospects during the growing season. Planned production goals, when adopted, were and still are of paramount importance as a measure of success. Information on crop prospects is apparently not collected regularly.

The USSR's change in policy in the early 1970's to import grain and other feedstuffs to offset domestic shortfalls has greatly increased the need for Soviet officials to know about crop prospects during the crop season. They issued special instructions in 1972 to collect crop prospect information from farms after a drought was predicted.

The Soviet Hydrometeorological Center and the Ministry of Agriculture have both been doing some work on forecasting grain production. However, no organization in the USSR has as yet been assigned reponsibility for making the "official" forecasts of Soviet crop production.

The Central Statistical Administration (CSA) is the specialized agency of the Soviet Government with primary responsibility for collecting, processing, and publishing statistical information, including most agricultural data. CSA is attached directly to the Council of Ministers, USSR, and has status equal to that of an all-union ministry. CSA has the pyramidal structure characteristic of most governmental organizations in the USSR.

The size and complexity of the components in the Soviet statistical system, as well as the number of people involved, generally decrease at each lower administrative level. An estimated 10,000 people are engaged in the processing of agricultural data in the CSA system. In addition, probably 250,000 people are engaged in bookkeeping activities on collective and state farms.

The work of CSA is done in accordance with an approved central, uniform plan. Standardized forms are used in reporting the required data to the CSA system. Ad hoc requests by components in the Soviet Government for additional work by CSA are considered and can be undertaken if approved.

The Soviets classify data three ways. "Statistical" data are those collected "openly" by CSA and generally can be published at any administrative level without restriction. "Operational" data are those collected by CSA or other components for use only by Soviet officials as an aid in operating the Soviet economy and are not available for publication. "Bookkeeping" data are detailed data, mainly concerned with the financial aspects of a given operation, and are collected through the ministries concerned for use by the Ministry of Finance, USSR.

Recordkeeping on Soviet farms is designed to provide the operating information required by farm managers and to provide on schedule the data required by CSA. Farm bookkeepers use standardized forms approved by CSA. Collective farms generally have a centralized bookkeeping office on each farm. State farms as well as large collective farms have small bookkeeping units on each section of the farm in addition to a relatively small central bookkeeping office. The leaders of the brigades or other units on the farms provide data concerning activities under their supervision to the chief bookkeeper at the end of each day. The bookkeeping offices summarize these data the next morning and report to the farm managers.

At specified times, the chief bookkeepers on the collective and state farms provide various data to the rayon statistical office, the primary unit in the CSA system. Weekly progress reports on such farming operations as spring seeding, crop harvesting, fall seeding, and fall plowing are submitted during the parts of the year when such operations are in progress. These reports are compiled rapidly by the CSA system (2 1/2 days), with the results at the USSR level available at noon each Wednesday. Farms submit monthly reports on livestock numbers and, in the early part of the year, on progress in machinery repair and seed preparation. Compilation of these reports is usually completed by about the 10th of the month. At the end of the year, each farm submits a comprehensive report on all aspects of its operation.

The data provided by the farms to the CSA system are used primarily to evaluate the progress being made in fulfilling planned goals. This is particularly true of data contained in the weekly and monthly reports. The annual reports also provide data for economic research carried out by agricultural institutes and other organizations.

The Soviet statistical system probably provides reasonably accurate data. For most data, the methodology entails rather complete enumeration of the activity or item being counted. Scales reportedly are used extensively in weighing commodities, and generally more than one person is involved in measuring or counting the results of a given activity. Finally, a special CSA unit audits work done by the statistical system for accuracy. Preventive measures reportedly are emphasized as a means of reducing errors and falsifications, but penalties are also levied.

The equipment used in the Soviet statistical system is being modernized. Computer centers are being established to replace the traditional oblast statistical offices. Calculating stations, with access to computers, are replacing the traditional rayon statistical office. Also, the main computer center is to be provided with more advanced electronic equipment. Thus, the traditional manual calculator or abacus is giving way to the mechanical desk calculator, the keypunch machine, and the electronic computer in Soviet statistical work.

COLLECTING AGRICULTURAL STATISTICS IN THE SOVIET UNION

By
Fletcher Pope, Jr.
Foreign Demand and Competition Division
Economic Research Service

INTRODUCTION

This report is based mainly upon information obtained during the visit of four U.S. Department of Agriculture (USDA) agricultural specialists to the Soviet Union, under the auspices of the current US-USSR agricultural exchange agreement. The United States and the USSR concluded an Agreement on Cooperation in the Field of Agriculture on June 19, 1973. Supervision of the agreement is the responsibility of a US-USSR Joint Committee on Agricultural Cooperation, and implementation is divided between two joint working groups, one concerned with economic research and information and the other with scientific and technological developments.

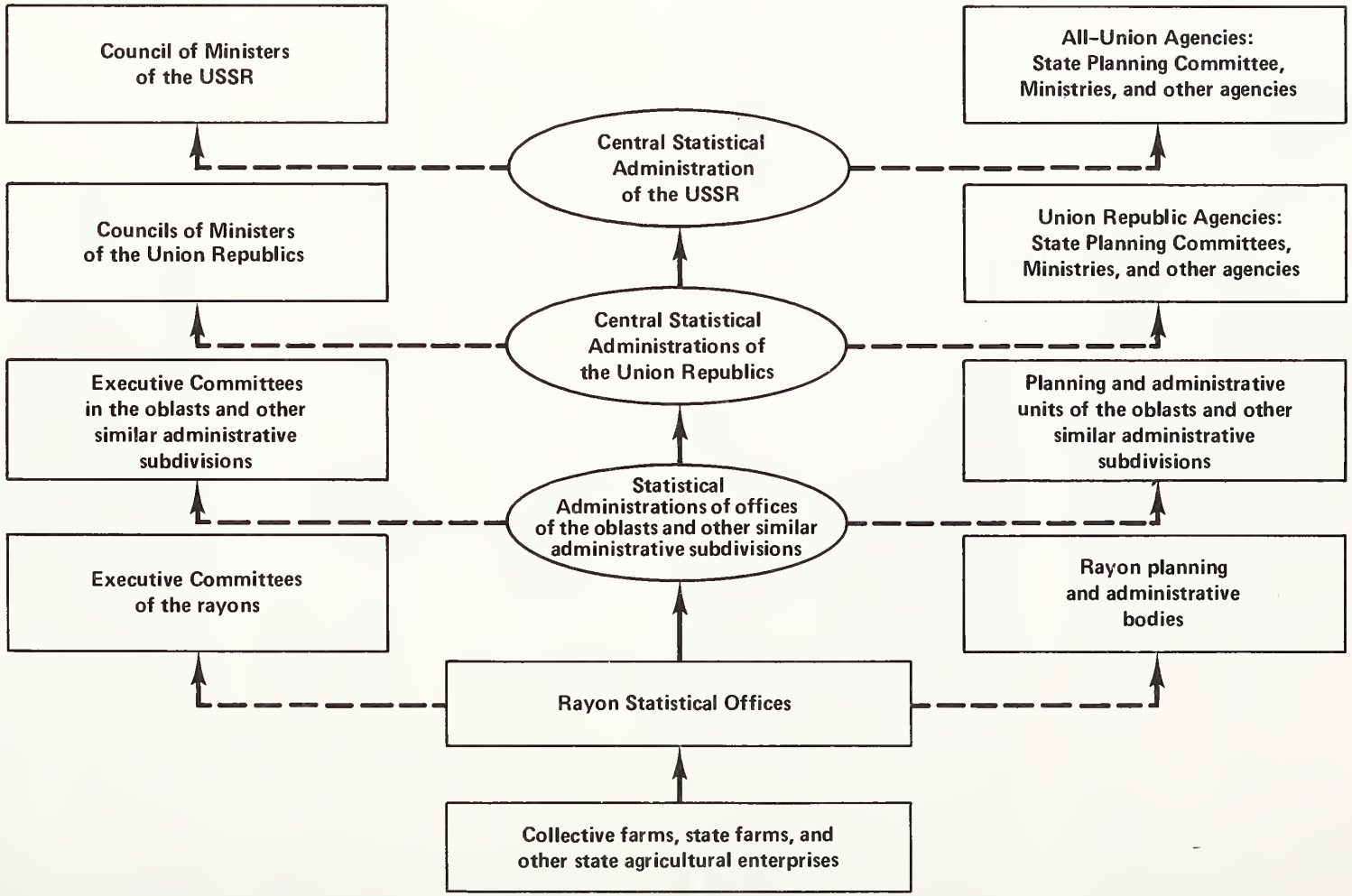
Our group visited the Soviet Union as part of the exchange program carried out by the Joint Working Group concerned with Agricultural Economic Research and Information. The main purpose of the trip was to study procedures for the collection, organization, and analysis of data on the production, procurement, and utilization of major agricultural commodities.

Team members represented three USDA agencies: Bruce M. Graham is Deputy Administrator and Chairman of the Crop Reporting Board, Statistical Reporting Service; Fletcher Pope, Jr., is an economist in the Soviet Union Program Area, Foreign Demand and Competition Division, Economic Research Service (ERS); James J. Naive is Leader of the Grains Program Area, Commodity Economics Division, ERS; and Philip L. Mackie is Deputy Assistant Administrator for Commodity Programs, Foreign Agricultural Service.

We visited the Soviet Union during August 20-September 18, 1974, about a month later than originally planned. Initially, the visit was planned to start on July 23, 1974, in order to observe the process of data collection and analysis during small grain harvesting. However, at the request of Soviet officials, the trip was postponed twice. In addition to Moscow, we visited Ulyanovsk and Tambov in the Russian Soviet Federated Socialist Republic (RSFSR) and Kiev and Kherson in the Ukraine Soviet Socialist Republic (Ukraine SSR).

Our visit was sponsored jointly by the Ministry of Agriculture, USSR, and by the Central Statistical Administration (CSA), USSR. Among the organizations and facilities visited were 10 farms (including five collective farms and five state farms); three oblast and three rayon agricultural and statistical offices and calculating stations; two republic statistical administrations; the USSR Ministries of Procurements, the Food Industry, and the Meat and Dairy Industry; and the Hydrometeorological Center. The team also visited or held discussions with officials of several research institutes, including the All-Union Institute of Agricultural Economics, and other facilities. The appendix to this report contains detailed information concerning the team's itinerary, facilities visited, and officials contacted.

DIAGRAM OF THE AGRICULTURAL STATISTICAL SYSTEM IN THE USSR



USDA

NEG. ERS 2222-75 (9)

Figure 1

SOVIET STATISTICAL ORGANIZATION

Statistical work in the Soviet Union is centered in an organization headed by the Central Statistical Administration, USSR (CSA-USSR). Prior to its organization in 1958, the statistical work was carried out by the different ministries in the executive branch of the Soviet Government; agricultural statistics were collected by the Ministry of Agriculture. The present statistical organization is similar in structure to most other components of the Soviet Government. It is pyramidal with components at all administrative levels (figure 1). Thus, in addition to CSA-USSR there are central statistical administrations in each of the union republics, statististical administrations or offices in each oblast or equivalent administrative subdivision, and statistical inspectorates or offices in each rayon. 1/

CSA has the status of a ministry in the Soviet Government. The Administrator of CSA-USSR is appointed by the Supreme Soviet of the USSR and is a member of the Council of Ministers, USSR. CSA-USSR is attached directly to the Council of Ministers, USSR and thus is not subordinate to any ministry. At the republic administrative level, the CSA's are also attached to the councils of ministers of the union republics and the administrators are members of those councils. The CSA's of the union republics have a dual subordination: (1) to the local republic government, and (2) to the CSA-USSR. With this dual subordination, the appointment of union republic CSA administrators is probably subject to the approval of CSA-USSR.

Below the union republic level the heads of the statistical offices are appointed by the statistical officials at the next administrative level and are responsible only to them. Thus, the administrator of the CSA in a given union republic appoints the heads of the statistical offices in each oblast in the republic. In turn, the head of the oblast statistical office appoints the statistical inspector for each rayon in his oblast. Consequently, a statistical official cannot be appointed or removed from office by any official on his own administrative level but only by his superior at the next higher administrative level.

The Soviet statistical organization performs a number of functions. The main task is the collection and processing of data and the provision of such data to various administrative, planning, and economic organizations. Some of these data, perhaps a large proportion, are not made available to the public but are for restricted use only by officials within the Soviet Government. CSA may also analyze some of the data and propose solutions to certain problems but this is not a primary function. The processing of data results in the drawing up of various balances, indices, and social accounts such as gross social product and national income, which are needed in the planning and administration of the economy. CSA supervises and controls the record-keeping and accounting in enterprises and on farms.

CSA also has responsibility for publication of data. Results of the statistical work by CSA-USSR that are published are contained in annual statistical handbooks such as "SSSR v Tsifrakh" (The USSR in Figures) and "Narodnoye Khozyaystvo SSSR" (The National Economy of the USSR); in periodic statistical handbooks concerned with a given sector of the economy such as "Selskoye Khozyaystvo SSSR" (Agriculture in the USSR); in articles, especially in the monthly Journal "Vestnik Statistiki" (Statistical Herald); and in miscellaneous special reports. Most of these handbooks and reports are printed by the CSA publishing house "Statistika" (Statistics).

1/ Compared with administrative subdivisions in the United States, the rayon is similar to our county and the oblast to our States. The United States has no administrative subdivision comparable to the Soviet republics.

CSA has control over the publication of all "statistical" data in the Soviet Union. 2/ Statistical handbooks and special reports are also published by CSA's of the union republics and by some oblast statistical administrations. All such publications, however, must be approved by the parent CSA. Publication of statistical data by any ministry or other organization in the Soviet Union is prohibited unless approved by CSA.

The statistical work in the Soviet Union is carried out in accordance with a central uniform plan using uniform procedures and methodologies. CSA has responsibility for developing the statistical plan and seeing that it is carried out. CSA develops or approves the standard forms to be used in keeping records and accounts in enterprises and on farms and the forms to be used in reporting the required data to the rayon statistical inspectors.

The amount of statistical work that can be done is limited by the budget of the CSA. Also, most of this work is covered in the uniform plan developed by CSA. Thus, the amount of unplanned statistical work that CSA can undertake is quite limited. Ad hoc requests for special surveys or for specific data have a much better chance of receiving CSA approval than requests for additional data series on a continuing basis.

The Soviet statistical organization is given broad mandatory authority. Organizations, enterprises, and farms must make available any statistics and accounts concerning their activities that are requested by CSA. All CSA directions and instructions are binding on the enterprises, farms, and other units. No organization can collect data without CSA approval. CSA maintains strict discipline over the keeping of records and accounts by enterprises, farms, and other units. Finally, CSA has authority to ensure the punctual and orderly delivery of the statistics called for in the plan.

The Central Statistical Board (Collegium) in CSA-USSR, as well as subordinate boards in the CSA's of the union republics, are the principal administrative and policy-making bodies in the Soviet statistical system. These boards are comprised of the administrator, his deputies, and selected division directors in the CSA's. The boards consider such aspects as: (1) the organization of statistics, (2) methods of improving the work, (3) automation of statistical work, (4) selection of staff members, and (5) improving the qualifications of statistical personnel.

There is also a Scientific and Methodological Council attached to the CSA-USSR. This Council provides for an infusion of knowledge and ideas by officials from other organizations into the work of CSA. Thus, the council may consist of scientists and officials from planning, financial, and other organizations in addition to selected CSA personnel.

The size and complexity of each component in the Soviet statistical system in general decreases from the top administrative level to the lowest level. There are a number of divisions in the CSA's, one division for each major sector of economic activity. Agriculture is one of these sectors. In the oblasts as well as in the smaller union republics the statistical administrations or offices are subdivided into sections which generally correspond to the divisions in the CSA's. At the lowest administrative level, the rayon statistical office is also divided into sections, but the number of people working in each section varies greatly depending upon the importance of the economic activity within the rayon.

The pyramidal structure of the Soviet statistical system can be clearly demonstrated in its agricultural work (figure 1). There are roughly 50,000 collective and state farms reporting to about 3,000 rayon statistical offices, or some 15-20 farms per rayon. In turn, the 3,000 rayons report to 170 oblasts, or an average

2/ See page 7 for definition of statistical data.

of 15-20 rayon statistical offices reporting to each oblast statistical office. Also the 170 oblast statistical offices report to 15 union republic CSA's which then report to CSA-USSR. Thus, there are in general roughly 15 statistical units reporting to each statistical unit at the next higher administrative level.

The Soviet statistical organization, however, is not as symmetrical as the averages indicated above would suggest. For instance, there are about 70 oblasts or comparable administrative subdivisions within the Russian Federation (RSFSR) reporting directly to the Central Statistical Administration of the RSFSR (CSA-RSFSR). There are no statistical offices for the economic regions in the RSFSR and CSA-RSFSR only reports regional data to CSA-USSR annually. 3/ For other reports only RSFSR totals are provided to CSA-USSR. Finally, the smaller union republics generally are not subdivided into oblasts but into rayons.

The structure of the Agricultural Statistics Division (ASD) in CSA-USSR is shown in figure 2. The director of ASD is directly subordinate to one of the deputy administrators of CSA and is also a member of the Central Statistical Board of CSA. The director of ASD in turn has three deputies and the work of the division is divided into seven branches. The Crop Production and Yield Branch is directly subordinate to the division director, which probably reflects the importance of this unit. One deputy director is also Chief of the Summary Statistics Branch while one of the other two deputy directors is responsible for supervising the work of two branches and the other deputy director for three.

This unusual organization of ASD suggests that the structure of the divisions within CSA-USSR as well as the structure of units in the statistical organizations at lower administrative levels may vary greatly. Speculation concerning factors affecting the structure of components in the statistical organization suggests the following: (1) Relative importance of a given activity to the economy, (2) differences in the volume of work, (3) variations in the difficulty of the work, (4) differences in the number of requests received for information, and (5) seasonality in the work.

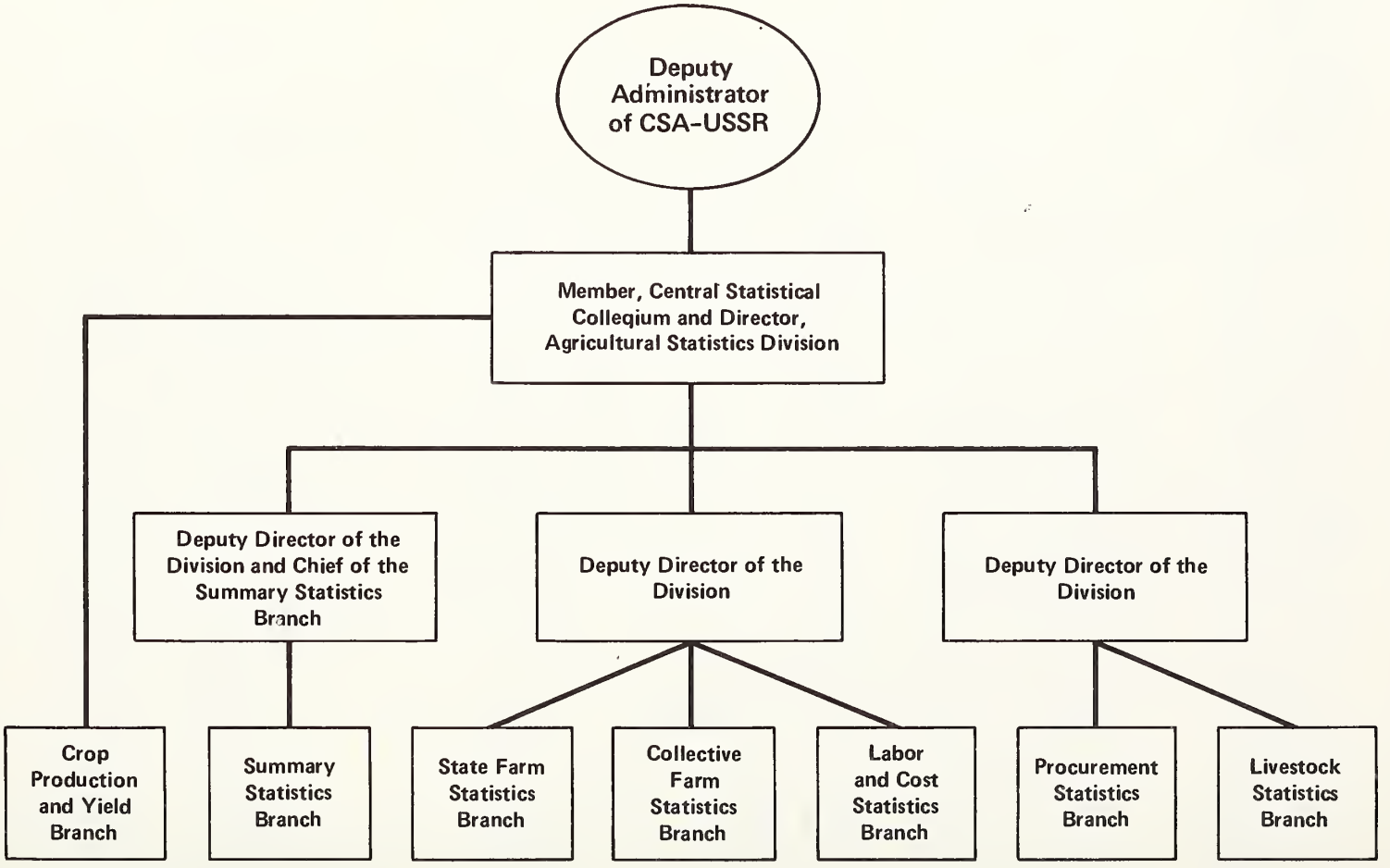
The agricultural components in the statistical organization at the different administrative levels have a greater similarity than between components in the system covering different areas of economic activity. The agricultural statistics divisions, at least for the larger union republics, probably are quite similar in organization to that of ASD in CSA-USSR. However, the agricultural statistics offices at the oblast level probably have only three or perhaps four sections, with these sections corresponding to the areas of statistical work for which the deputy division directors at the USSR level are responsible. Finally, in the rayon statistical offices, these three or four areas of responsibility are probably handled at most by several individuals for each area.

ORGANIZATION OF STATISTICAL WORK ON FARMS

The organization of recordkeeping and accounting is basically quite similar from farm to farm in the USSR. However, there is some variation between farms, particularly between collective farms and state farms. CSA makes recommendations concerning the organization of statistical work on the farms but the chief bookkeeper can adapt the record keeping and accounting to best meet the needs of the farm management so long as the required data are provided on schedule to the rayon statistical inspectorate. CSA-approved primary forms are used on all farms for compiling the data that are to be reported to the rayon office. Farms can develop their own forms for collecting data which are used solely in the management of the farms.

3/ These economic regions are geographic groupings of oblasts similar to the U.S. regional groupings of States such as the North East or North Central States which of course have no formal administrative government.

THE STRUCTURE OF THE AGRICULTURAL STATISTICS DIVISION OF THE CENTRAL STATISTICAL ADMINISTRATION ATTACHED TO THE COUNCIL OF MINISTERS OF THE USSR (CSA-USSR)



USDA

NEG. ERS 2223-75 (9)

Figure 2

Collective farms generally have centralized bookkeeping offices. These offices usually have some 5-10 bookkeepers and are supervised by a chief bookkeeper. The chief is responsible or accountable to the rayon inspector as well as to the farm chairman. The chief bookkeeper each evening receives data from the leader of each team or brigade concerning the work done that day by each unit or component in his team or brigade. The bookkeeping office summarizes these data the following morning and provides the results to the farm chairman.

State farms have noncentralized bookkeeping units. The central bookkeeping office is small relative to that on most collective farms. The large state farms have small bookkeeping units containing 2-3 people in each section of the farm. These units summarize the data for their section before submitting it daily to the central bookkeeping office. On smaller state farms, the deputy leader for each section on the farm has the responsibility for keeping records for his section and at the height of the harvest season he is provided with an assistant. A relatively few large collective farms have a recordkeeping organization similar to that of state farms.

The chief bookkeepers on state farms are also responsible or accountable to the rayon statistical inspectors as well as to the farm directors. However, when the state farm is subordinate to a "trust," the farm bookkeeper may be responsible to the statistician in the trust rather than directly to the rayon inspector. 4/

The team leaders or brigadiers on collective and state farms provide data to the bookkeeping offices on almost every aspect of the activities for which their teams or brigades are responsible. These data include area, yield, and production of crops; numbers, weight, and sales of livestock and poultry; inventories of materials and equipment; utilization of inputs such as labor, fuels, lubricants, and agricultural chemicals; and daily progress in such operations as plowing, seeding, cultivating, harvesting, and production of crops and livestock products.

The bookkeeping offices maintain ledgers which are primary documents used in preparing an annual report for each farm. There are standard ledgers for keeping records on livestock enterprises and on production of various crops. The left-hand side of these ledgers is designed to maintain a running account of the expenses incurred in the enterprise. On the right-hand side, a record is kept of the quantity and value of the output of the enterprise with the value being based on the cost of production in the enterprise during the previous year.

TYPES OF DATA

Members of the USDA team spent considerable time and asked many questions in trying to understand the definition of or the distinction between the different types of data referred to by Soviet officials. There apparently are three types of data: statistical, operational, and bookkeeping. A good understanding of the distinction between the three types of data is difficult because a given figure can change from one type of data to another depending upon where it is located in the statistical system. Also, a given figure perhaps might be included in more than one type of data; for example, one official referred to operational statistical data.

Statistical Data

Statistical data have certain rather specific characteristics. To be classified as statistical, the data have to be reported through the CSA system. Such data are generally much less detailed and thus considered to be more important or significant than

4/ A "trust" generally involves the combining of a number of state farms specializing in a given activity into an intermediate organization.

bookkeeping data. Finally, statistical data can be published, if desired, at any administrative level in the Soviet statistical system. Thus, all data contained in Soviet statistical handbooks, newspapers, and journals fall into the category of statistical data. In some instances, there may be some restriction on the time or date when a given kind of data can be published.

Operational Data

Operational data are collected solely for use in managing a farm or other enterprise, a ministry, an oblast or republic, or the USSR economy as a whole. Such data are not published and are available only to Soviet officials. Operational data apparently are of many kinds. Some data are collected by the bookkeeping office on the farm solely for use by the chairman or director in making decisions concerning the operation of the farm. Any data collected by a ministry or other organization through its own structure for its own use are classified as operational. For example, during periods of heavy slaughtering of livestock, the Ministry of Meat and Dairy Industry collects data on meat production every 5 days for use in appraising the current situation and identifying problems, because the semi-monthly schedule of statistical data collection by the CSA system does not provide sufficiently timely data. Finally, a large amount of operational data are probably also collected by the CSA for use by top officials in managing the Soviet Government and economic system. However, Soviet officials were careful not to be reveal to the USDA team members the amount of such operational data collected or the kinds of data falling into this category.

Bookkeeping Data

Bookkeeping data contain a great amount of detail, including data used in calculating cost of production, financial statements, and productivity. Bookkeeping reports are for internal use and flow up through the ministries involved and not through the CSA system. Bookkeeping data at the all-union level are collected by the Ministry of Finance, which also designs the forms used in reporting the bookkeeping data, but these forms must still be approved by CSA.

COLLECTING, PROCESSING, AND PUBLISHING AGRICULTURAL DATA

Collective and state farms in the Soviet Union provide a large volume of data at various intervals throughout the year to the rayon statistical inspectorates, the primary units in the Soviet statistical system. These data are provided by the farms' chief bookkeepers and represent summaries for the farm of the data received from the team leaders or brigadiers. Data are required to be submitted to the rayon statistical office weekly, monthly, or annually.

The data submitted weekly to the rayon statistical office generally are concerned with the progress achieved to date in a given operation as of Monday morning. These data cover spring seeding, harvesting, production of various crops, fall seeding, and fall plowing. Weekly reports on spring seeding progress are made from about April 1 to June 15, harvesting and production of most crops from about July 1 to October 1, and fall seeding and fall plowing from about August 15 to October 15. In making these reports, the chief bookkeeper on the farm must sum the daily farm results for the 7 days from Monday through Sunday and then add this weekly total to the cumulative total reported to the rayon office the week before.

The Soviet statistical system is able to compile these weekly data very rapidly. These data are reported from each administrative level to the next higher one by telephone or telegraph. Then CSA-approved reporting forms containing the data are

sent by mail for verification purposes. The schedule for these data to move up through the statistical system is as follows:

(1) The farms must submit the data to the rayon inspectors by noon on Monday,

(2) The rayon inspectors must have the data to the oblast statistical office by the close of business on Monday or by the beginning of business on Tuesday,

(3) The oblast statistical offices must have the data to the union republic CSA's by noon on Tuesday,

(4) The union republic CSA's must have the data to CSA-USSR by the close of business on Tuesday, and,

(5) CSA-USSR has the results for the Soviet Union as a whole available for distribution to interested components in the Soviet Government and to correspondents for Soviet newspapers by noon on Wednesday.

Thus, the results of the weekly progress reports for the USSR are compiled in two and a half days and selected data from the reports are generally published in the issue of "Izvestiya" (News - the Soviet Government's newspaper) that is distributed Wednesday evening and in "Selskaya Zhizn" (Rural Life - the Soviet agricultural newspaper) and "Pravda" (Truth - the Communist Party newspaper), distributed Thursday morning. The results of these weekly progress reports are available for distribution to interested government components and to correspondents at the rayon, oblast, and union republic levels at the same time the data move up through the statistical system. Consequently, oblast and union republic newspapers can publish the results of the weekly progress reports for their areas.

Each administrative level in the pyramidal statistical system performs about an equal amount of work in processing the data. The rayon statistical office adds the data from each farm to arrive at totals for the rayon. However, in those union republics that have both a ministry of agriculture and a ministry of state farms, data from the farms are totaled separately for collective farms and for state farms. At the oblast level and in the smaller union republics, the statistical office adds the data from each rayon to arrive at totals for the oblast or the union republic. In turn, the CSA's in the larger union republics sum the data from each oblast in arriving at totals for the union republics. Finally, CSA combines the data from the 15 union republics in arriving at totals for the USSR.

Thus, as the data move up through the statistical system, various kinds drop out at each administrative level. Compilations made at the rayon level result in data dropping out for individual farms. In turn, the compilations made at the oblast and union republic levels, respectively, result in data for individual rayons and for individual oblasts dropping out.

The major monthly report submitted to the rayon statistical inspectorates is concerned with livestock raising on the collective and state farms. These reports contain data on production of livestock products from January 1 to the first of the month covered; available feed supplies on November 1, December 1, February 1, March 1, and May 1; livestock numbers by type on the first of the month and births and deaths since January 1; cow and laying hen numbers on the first of the month; and number of artificial inseminations since the first of the year. 5/

5/ Data on livestock by breeds is collected only at 5-year intervals.

Other monthly reports are generally made seasonally. From January 1 until seeding, the farms must submit data on the amount and quality of seed on the farms as of the first of the month. Also, from January 1 until seeding and harvesting, the farms are required to provide data on the inventories and condition of agricultural machinery on the farms as of the first of the month.

The monthly reports do not move up through the statistical system as rapidly as the weekly progress reports, because the time factor is not as important. But they are still available in CSA by about the tenth of the month. The farms must submit the reports to the rayon office by the first or second of each month and the processing of these reports at each administrative level takes a day or two. As with the weekly reports, the results of these monthly reports are available to interested components in the Soviet Government and to correspondents for Soviet newspapers at the various administrative levels as the reports move up through the statistical system.

One report that is required only once each year from the collective and state farms is concerned with sown area. It is submitted by the end of June after spring seeding has been completed, and contains much more detail on sown area than the weekly progress reports. In addition to the final data on areas sown to various spring crops, this report contains data on areas of winter grains and perennial grasses remaining for harvest.

The compilation of preliminary data on crop production for the USSR as a whole is completed during the second half of October and is available for publication or for use in speeches, if desired, at the November 7 celebration. Data on production of late crops such as sunflowerseed, sugarbeets, cotton, potatoes, as well as corn, are not available much before October. However, compilation of data on production of grain other than corn extends over a considerable period depending upon the completion of harvesting in a given republic or economic region. Thus, collection of grain production data begins in June for the Central Asian and Transcaucasian republics, continues in July and August for the Ukraine and adjacent republics and economic regions of the RSFSR, and finally is completed for the economic regions in Siberia by the last half of October. There is no indication of quality provided by the farms in these grain production data.

Soviet statistical officials told the USDA team that total grain production data were not compiled by CSA-USSR until about November 1. They said that the leadership in Moscow was interested in grain procurement progress but not in receiving grain production data until the RSFSR and Kazakhstan had finished harvesting. Thus, the grain production data provided by the collective and state farms in the weekly harvesting progress reports reportedly move up through the statistical system only to the oblast level or at most to the republic level in the smaller union republics.

This is most difficult to understand, particularly in view of Soviet grain purchases in the world markets in recent years. Why would the leadership in Moscow be more interested in the area of grain cut down into windrows and the area of grain picked up and threshed than in the amount of grain produced? Since the farms report the amount of grain harvested along with these area data, the movement of the grain production data up through the statistical system would apparently have to be stopped at a given administrative level if all other data included in the weekly report continued on to the top. Finally, a good estimate of the size of a given grain crop can be made after a fourth or at best a half of the area has been harvested and does not need to wait until harvesting has been completed.

The most comprehensive report made once each year is the annual report prepared and submitted by each collective and state farm. This report contains data on all aspects of the farm and its operation during the year. In preparation for this report, an inventory is made between October 1 and December 1 of all products on the farms,

including agricultural products, equipment, and supplies. The data in these annual reports are used to compile the statistics published on agriculture in Soviet handbooks, including calculations of costs of production, productivity, efficiency, and profitability. These reports also provide the data for economic research carried out by agricultural institutes and other organizations.

Data on the procurement of agricultural products are compiled both by CSA and by the Ministry of Procurements. Statistics on the procurement of all agricultural products except grains and sunflowerseeds are reported up through the central statistical system twice each month. Procurement receipts for all agricultural products other than grain and sunflowerseeds are summarized by the rayon statistical offices and sent to the oblast statistical offices on the first and sixteenth of each month. Data on procurements of grain and sunflowerseeds are compiled by the local procurement centers and reported up through the Ministry of Procurements organization each 5 days during harvesting. The quality of the grain is indicated in the procurement data compiled by the Ministry of Procurements but not in the production data compiled by CSA. No comprehensive, quantitative data on quality of Soviet grain crops are published.

By law, data on grain procurement for the USSR as a whole cannot be published prior to November. Thus, grain procurement data are compiled during harvesting at the union republic level only, and not for the USSR. The Soviet law restricting the publication of USSR grain procurement data probably was adopted at the request of the Ministry of Foreign Trade.

Data on agricultural production from private garden plots and from privately owned livestock are based on sample surveys rather than the more or less complete enumeration used in determining crop and livestock production from collective and state farms, i.e. the socialized sector of Soviet agriculture. Roughly two-fifths of the oblasts are selected for the sample surveys to provide a good geographic distribution. For example, 26 oblasts in the RSFSR and 13 in the Ukraine are included in the survey. Then in these oblasts 30,000 families, or 2-3 percent of the total number in the USSR, are selected in which household budget surveys are made. A number of indicators are used in selecting the families to be included in the survey so that they will be representative, one indicator being livestock ownership. There is one full-time enumerator for each 22-25 families included in the survey.

Data on numbers of privately owned livestock are compiled as of January 1 each year. These data are obtained from a ledger on privately owned livestock maintained by each village Soviet or local government council. Purchases, sales, births, and deaths of privately owned livestock are recorded in these ledgers. Thus, the member of the village Soviet responsible for the ledger compiles the number of different types of livestock owned by individuals in the village as of January 1 each year and submits these data on the required form to the rayon statistical office. Such a compilation, therefore, represents a relatively complete enumeration of privately owned livestock, much the same as the enumeration of livestock on the socialized sector.

EVALUATION OF CURRENT CROP PROSPECTS

Historically, Soviet officials apparently felt little need for quantitative estimates of crop production during the growing season and probably devoted little effort to such crop forecasting. Under the Soviet economic system, farm activities are conducted in accordance with the annual economic plan and most prices received by farmers are fixed by the State. Thus, current crop prospects have had little impact on prices received, and farm managers have had relatively little authority to adapt farm activities to changes in crop prospects. Also, Soviet officials in the past have

generally adjusted domestic consumption, through "belt-tightening" when necessary, to equate utilization with production.

The Soviet Union on occasions has abandoned its traditional role as a net grain exporter and has purchased large amounts of grain. Disastrously poor crops in 1963 and 1965 forced Soviet officials to purchase large quantities of grain in order to meet domestic grain requirements. More recently, the Soviets apparently adopted a policy in conjunction with their Ninth 5-Year Plan (1971-75) of purchasing grain from other countries as needed to offset shortfalls in planned domestic grain production. As a result, the Soviets have been net grain importers in more recent years.

This greater reliance on the world grain market must have increased the need for Soviet grain buyers to know as early as possible the amount of grain to be purchased, which in turn would require good information on grain crop prospects during the growing season. Nevertheless, it is reportedly against Soviet law to compile data on grain production above a certain administrative level (perhaps the oblast level) without special permission. A special CSA instruction in 1972 reportedly permitted the compilation of such grain production estimates early in the season, since a drought had been forecast.

Several Soviet organizations currently are developing methodologies for making quantitative crop forecasts during the growing season. The Hydrometeorological Center (HMC) in Moscow has been using various weather factors and crop condition measures in its regression analysis to estimate crop yields. This work has basically been perfected for certain grain crops in individual oblasts. This work for each of the grains for the country as a whole reportedly is still in the developmental stage, but HMC's goal is to complete the development of a reliable forecasting methodology in 10 years or perhaps a little sooner. The USSR Ministry of Agriculture is also doing some work on a methodology for making its own grain crop estimates during the growing season. In addition to weather factors, the ministry uses such parameters as crop varieties, fertilizer use, cultural techniques, and fallowing, in estimating grain prospects.

Official responsibility for making crop forecasts for the USSR has not been assigned, at least publicly as yet, to either HMC or the Ministry of Agriculture. However, in view of the increased need for such forecasts by Soviet foreign trade officials, the assignment of such responsibility, if not already made, will likely be made soon.

The Soviet Hydrometeorological Service (HMS) is currently doing a lot of work compiling information on weather conditions and crop developments. Scattered throughout the Soviet Union, HMS has about 2,000 stations that report by teletype to HMC in Moscow. HMS personnel at these stations report the usual types of weather data such as temperature, precipitation, cloud cover, visibility, and wind speed as required by the World Meteorological Organization. In addition, these personnel on the 10th, 20th, and 30th of each month take measurements of such factors as soil moisture, soil temperature, and, in the winter, snow cover and make observations concerning stage of growth and condition of crops in the area during the growing season. The results of these measurements and observations are then reported to Moscow. HMC processes all this information to obtain a comprehensive picture of weather and crop conditions for the USSR.

HMS bulletins on the results of this work are prepared for the first, second, and third decades of each month. These bulletins apparently contain a rather extensive narrative on weather and crop conditions in the major agricultural areas of the Soviet Union as well as a number of supporting maps showing the more significant weather factors and crop developments for the 10-day period. Currently, only 200 copies of these bulletins are reproduced and their distribution is limited to Soviet Government officials. Summaries of the more significant results contained in these bulletins, however, are published regularly in the Soviet agricultural newspaper (Selskaya Zhizn) in articles entitled "Weather and Crops." These articles generally appear in the

newspaper about 4 days after the end of the 10-day period, i.e. on the 4th, 14th, and 24th of the month.

HMS also evaluates the damage done by winter weather to crops. Representative sample plots of winter grains and perennial grasses are selected on the basis of such factors as depth of snow cover and depth of frozen soil. These sample plots are then dug up in late winter and taken into a heated building, preferably a hothouse. Here the plants are maintained until their viability can be determined. HMS can then give agricultural officials advance warning concerning the extent and severity of winter damage to crops in the major growing areas. Dissemination of the results of this work apparently is limited to appropriate Soviet agricultural officials.

U.S.-USSR AGRICULTURAL STATISTICAL SYSTEMS COMPARED

A comparison of the systems for collecting and processing agricultural statistics in the United States and the Soviet Union reveals some similarities but many more contrasts. Differences in the economic systems and the organization of agriculture are the major reasons for the contrasts. The United States has roughly 2.5 million, mainly family, farms while the Soviet Union has less than 50,000 large, socialized farms. Also, Soviet farmers under their planned economy are quite limited in the number of economic decisions open to them while American farmers must make many economic decisions based upon market forces and prices.

The organizational setups of the agricultural statistical systems differ greatly, too. There is a specialized statistical organization in the Soviet Union with a status equal to that of a ministry, with responsibility for collecting and processing data on all sectors of the Soviet economy, including the agricultural sector. In contrast, current U.S. agricultural data are collected and processed by the Statistical Reporting Service, an agency of the U.S. Department of Agriculture.

Probably the greatest contrast between the two agricultural data systems is in the techniques used. The U.S. system is based on sampling, and in recent years increasingly on probability sampling. Data collection is done by mailed questionnaires and personal interviews of farmers, and by objective yield surveys; participation by U.S. farmers is voluntary. The Soviet system, on the other hand, is based on complete enumeration of collective and state farms; participation by the farms is mandatory. Penalties can be imposed for nonparticipation. Sampling in the Soviet system is limited to household budget surveys which provide data on per capita food consumption and on production of private-plot crops and of privately owned livestock.

The types of data collected by the agricultural statistical systems in the two countries also provide similarities and contrasts. Both systems collect basic crop and livestock data including crop area, yield, and production, livestock numbers, livestock products, stocks, and marketings. These data describe the current situation at the time of reporting or the results of past farm activities. In addition, the U.S. system collects data on prices paid and received by farmers.

The U.S. system also emphasizes collection of data from farmers on their crop planting and livestock breeding intentions and on preharvest yield forecasts. Apparently, no such information is collected regularly by the Soviet system.

The difference in the types of agricultural data collected is probably attributable to differences in the primary users of such data in the two countries. Soviet officials rather than Soviet farmers are probably the primary users of agricultural data in the USSR, and the use they make of such data is in developing and overseeing the implementation of agricultural plans. In the United States, farmers and agribusinessmen are the primary users of agricultural data in connection with the economic decisions they are required to make.

This difference in users, in turn, probably explains the variation between the two countries in policies concerning publication of agricultural data. The United States has a liberal policy with respect to publication of agricultural data because of the need to disseminate such information as quickly as possible for maximum usefulness. Great care is taken to assure that the reports are made available to all users simultaneously so that none will benefit by prior access. The policy on publication of agricultural data in the USSR is much more restrictive since some information is collected solely for use in Government decisionmaking and its dissemination limited to Soviet officials.

The Soviet agricultural data system has some advantages as well as disadvantages. The Soviet system eliminates most sampling error because of complete enumeration from collective and state farms. Also, the Soviets have little, if any, problem of nonresponse. However, the Soviet system is very costly in terms of the manpower required, more expensive than the United States could justify. Nevertheless, both systems appear to meet the basic objective of providing the agricultural information required by the respective countries and providing it when needed.

SOVIET USE OF AGRICULTURAL STATISTICS

The primary use of agricultural statistics by Soviet officials is in regulating the operation of their planned agricultural economy. In this connection, however, there are substantial differences in the uses made of the various types of data collected. Some data are used mainly in agricultural planning while other data provide information on progress in the implementation of the annual agricultural plan.

The periodic reports collected through the statistical system, including the weekly seeding and harvesting data, provide indicators on progress being made in meeting planned agricultural goals. These data are compiled by the statistical offices or components at each administrative level in the Soviet Government and the results made available to appropriate planning and agricultural officials at each level. These officials then may take whatever measures they consider feasible to correct any imbalances or problems developing in the agriculture in their area of responsibility.

The annual reports of the collective and state farms contain data used primarily in agricultural planning. These reports contain many types of data concerning the farm and its operation during the year. These data provide information which permit the determination of the inputs required and costs involved in producing various commodities. Therefore, these reports are probably used extensively by Soviet agricultural officials as well as planning officials in developing agricultural goals for the year or years ahead and the inputs required to fulfill these goals. These reports also provide the agricultural and planning officials with final data with which to measure the degree of fulfillment of the planned goals for the preceding year.

Soviet agricultural economic research is concerned mainly with production problems. Such research in the USSR is largely confined to a few agricultural economic institutes. Researchers in these institutes rely mainly on information contained in the annual reports of the collective and state farms for the data used in their economic studies. However, the institutes can make special requests to CSA for the collection of data required for high-priority studies.

ACCURACY OF SOVIET AGRICULTURAL STATISTICS

The Soviet statistical system, at least in theory, should provide accurate agricultural data. The methodology used in the system generally entails almost complete enumeration of the activity or item being counted, at least for those on collective and state farms. All farms are required by law to submit the necessary data on schedule

and must comply with instructions for reporting the data. The uniform system of statistical procedures and standardized forms probably contributes to the accuracy of the data produced. Also, considerable attention is currently given to training of personnel in the statistical system.

CSA officials stated to the USDA team that they concentrate on achieving accuracy in the data produced by their statistical system. A special CSA unit audits the statistical work for accuracy. This unit develops a systematic plan for checking the accuracy of data. Rayon inspectors investigate statistical work on the farms as called for in the plan and at other times when considered necessary. The rayon statistical inspectors also give the bookkeepers on the farms advice and guidance on their statistical work, based on recommended procedures developed by CSA. Finally, CSA officials at any administrative level above the rayon also carry out investigations whenever they question the accuracy of the data being submitted.

There apparently is a lot of actual weighing of produce and counting of items in developing the primary data on the farms. Probably most collective and state farms have scales. On one farm visited, each of the seven production brigades had its own scale capable of weighing loads up to 15 tons. On one farm visited all produce was weighed whether it was delivered to the state or not; on another farm at least forage or silage was sampled by weighing every fifth load.

The number of people involved in developing the primary data on the farms probably contribute additional control over their accuracy. In grain harvesting, for example, the combine operator and truck driver are both involved in recording the amount of grain harvested by the combine. Then the truck driver and scales operator both observe the weighing of the grain at the farm's grain reception point. Also, the combine operator's brigade or team leader has responsibility for reporting the amount of grain harvested by each combine operator in his brigade to the chief bookkeeper on the farm at the end of each day. Most other operations also involve two or more people which necessitate collusion among them if there was systematic falsification of data.

There nevertheless are some errors and falsification in the data. The amount of falsification present in the data was stated to be less than before the decree on falsification of data was enacted in 1961, but some still exists. Preventive measures reportedly are emphasized in reducing errors and falsification, but penalties are also levied. Most errors were said to be caused by newcomers or by inexperienced personnel.

The USDA team members were not given the opportunity to see firsthand much of the actual operation of the components in the statistical system. The standardized forms used by the farms reporting the data to the rayon statistical office, except for one or two, were not made available to the team members until the end of the visit. The time spent on farms was generally spent in the offices of the chairman or director rather than observing the operations in the bookkeeping offices. Thus, on the basis of observations and experience during the trip, the USDA team members were not able to form a good opinion of the accuracy of Soviet agricultural data.

Some information obtained by team members suggests that there probably is a great difference between the theoretical operation of the Soviet statistical system and its actual operation. On one farm, the director stated that the rayon statistical inspector had not visited the farm during the 10 years that he had been in charge of the farm. On another, the chief bookkeeper was described as one of the best and the accuracy of his data was checked only when it was felt to be necessary. Also, the amount of statistical work required at the first of each month and at the end of the year make the work in the bookkeeping office on the farms very difficult.

PERSONNEL WORKING ON SOVIET AGRICULTURAL STATISTICS

About a quarter-million people are estimated to be engaged as bookkeepers on farms in the Soviet Union. This assumes an average of 5 persons engaged in bookkeeping activities on each of almost 50,000 collective and state farms. The number of persons in the bookkeeping offices of the farms visited ranged from 4 to 13, the latter being a specialized, suburban state farm. In addition to providing the data required by CSA, these bookkeepers compile the data needed by the collective farm chairmen and state farm directors in the operation of their farms. Thus, a major part of the activities of these bookkeepers is similar to the recordkeeping done by the American family farmer or his wife.

Neverthless, close to 10,000 people are estimated to be occupied with the collection and processing of agricultural data within the Soviet statistical system above the farm level. About three-fourths of these are in the 3,000 rayon statistical offices. The average rayon statististical office probably has 2-3 persons working on agricultural data, i.e. 3,000 x 2.5 = 7,500. In rural areas about half of the people in the rayon statistical offices reportedly work on agricultural data. For the Ukraine, there are an average of 4-5 people in a rayon statistical office but the range is from 2 to 6 persons.

In turn about three-fourths of the remaining agricultural personnel in the Soviet statistical system are in the oblast offices. In each of about 170 oblast statistical offices there are close to 10 people occupied in the processing of agricultural data or a total of 1,500-1,700 persons. There reportedly are an average of 9-10 persons occupied in the processing of agricultural data in the oblast statistical offices in the Ukraine.

There are close to 500 persons occupied in the processing of agricultural data in the agricultural divisions of the central statistical administrations of the union republics and of CSA-USSR. The RSFSR and Ukraine reportedly have 50 persons each in their CSA agricultural divisions and it is assumed that Kazakhstan and Belorussia would each have a similar number. It is further assumed that the remaining 11 smaller union republics would each have about 10-15 agricultural data personnel, a number somewhat larger than that in the average oblast statistical office. The agricultural division of CSA-USSR has 70 people and the computer center an additional 30 individuals for all types of data processing.

TECHNOLOGICAL DEVELOPMENTS IN THE SOVIET STATISTICAL SYSTEM

Equipment used in the Soviet statistical system is currently undergoing modernization, particularly at the rayon and oblast levels. The statistical administrations in the major union republics and CSA have been using electronic computers for a number of years. The main computer center in Moscow was organized in 1954. However, the equipment in general use at the lower administrative levels has been relatively modest, but apparently effective for the work required.

Observations suggest that in the past much of agricultural statistical work at the oblast level or below was done using abacuses. Such work in the bookkeeping offices on collective and state farms probably was carried out almost exclusively on these manual calculators. The processing of agricultural data on abacuses may still be the primary method in the rayon statistical offices and their use may still be important in the oblast offices. However, desk calculators are frequently used in the rayon offices and are believed rather common in the oblast statistical offices. Given the large staff employed to compile agricultural data, this equipment, including efficiently operated abacuses, is believed to have been generally quite adequate for the data processing required at these administrative levels.

Rayon information-calculating stations (RIVS = Rayonnyye Informatsionno-Vychislitelnyye Stantsii) are replacing the traditional rayon statistical offices. The RIVS have more modern data processing equipment than the traditional rayon offices, and eventually each of the 3,000 rayons will have a RIVS which will have access to an electronic computer. The RIVS operate according to CSA instructions and on the basis of "khozraschyot," i.e., are financially self-supporting. The RIVS have two functions: (1) to provide the data required by the oblast statistical offices; and (2) to provide data processing services under contract to various enterprises, including farms, within their respective rayons. The use of RIVS services reportedly is voluntary at present for collective farms but mandatory for state farms.

The data processing services provided by the RIVS apparently are still in the development stage. In the future, the amount and frequency of data processing by the RIVS probably will increase and the cost per unit of work likely will decrease. One RIVS visited by the USDA team charged 400 rubles per month per farm in 1974. The farm records maintained by the team leaders or brigadiers on the farms under contract were transmitted to the RIVS once a month. The station processed these data and provided each farm with information on its payroll, production of various commodities, costs of production, and other indicators called for in the contract.

Computer centers are currently being organized to replace the traditional oblast statistical offices. In 1974, there were computer centers in 46 oblasts in the RSFSR and eight more were to be organized in 1975. All RSFSR oblasts reportedly are to have computer centers by 1976. Similar progress in establishing computer centers is probably also being made in the other union republics. As with the RIVS, the computer centers are to be financially self-supporting and to receive much of the revenue required from contract work. These centers are connected to the union republic computer centers and the main computer center by teletype, and eventually the oblast computer centers will receive the data from the RIVS on magnetic or paper tape.

The main computer center in Moscow has four departments or sections. The first department has the teletype machines for receiving the data and operates two shifts during busy seasons. The second department has desk calculators and keypunch machines to prepare the data as necessary for the computer. The third department contains the computers and does the required data processing. The fourth department is concerned with maintenance of the equipment in the center. The organizational structure of the computer centers in the union republics is similar to that of the main computer center.

The equipment observed in the various statistical facilities visited by the team appeared adequate for the type of calculations done. The compilation of agricultural data in the periodic reports submitted through the Soviet statistical system generally involves the addition of separate components into new totals at each administrative level. These mathematical operations can be performed very satisfactorily with a desk calculator or an abacus. The use of computers for agricultural data is in general limited to the processing of the detailed data contained in the annual reports of collective and state farms.

The main computer center had various models of "Minsk" computers. These computers probably are second generation equipment since officials at the center stated that they would soon be replaced by new "Ryad" computers.

APPENDIX

Detailed Itinerary and Principal Officials Contacted

Date	Place	Organizations and Officials
8-20-74	Moscow	Central Statistical Administration (CSA-USSR) Mr. Manyakin, V. I., Deputy Administrator.
		Mrs. Tresorukova, Z. G., Deputy Director of the Division of Agricultural Statistics.
		Mr. Pogosov, I. A., Director of the Division of Industrial Statistics.
		Mr. Martynov, V. V., Director of the Division of International Statistics.
		Mr. Nesterov, L. I., Deputy Director of the Division of International Statistics.
		Mr. Yurkov, P. V., Director of the Division of International Relations.
		Mr. Ostrovsky, EH. N.-Deputy Director of the Division of International Relations (also Mr. Ostrovsky was one of two escorts for the USDA team during the tour in the USSR).
8-20-74	Moscow	Division of Agricultural Statistics in CSA-USSR
		Mr. Voshchukov, L. I., Chief of the Crop Production and Yield Branch.
		Mr. Mitroshin, A. I., Deputy Chief of the Crop Production and Yield Branch.
		Mrs. Gayevshaya, V. M., Chief of the Summary Statistical Branch.
		Mrs. Shchitchkina, Deputy Chief of the Summary Statistics Branch.
		Mr. Domansky, V. A., Deputy Chief of the Summary Statistics Branch.
		Mr. Vichlyaev, A. P., Chief of State Farm Statistics Branch.
		Mrs. Pozdnyakova, N. P., Consultant in Collective Farm Statistics Branch.
		Mrs. Orekhova, V. M., Chief of the Labor and Cost Statistics Branch.
		Mrs. Roschufinda, M. A., Chief of the Procurement Statistics Branch.

Date	Place	Organizations and Officials
8-21-74	Moscow	Ministry of Agriculture, USSR.
		Mr. Kosynkin, A. A., Deputy Administrator of the Main Administration for Planning and Economics.
		Mr. Shimko, A. N., Chief of the Section on Specialized Livestock Raising.
		Mr. Vlasenko, A. L., Deputy Director of the Division of Bookkeeping and Accounts.
		Mr. Buryakov, Yu. P., Deputy Administrator of the Main Administration on Grains and General Crop Production.
		Mr. Sultanbaev, A. O., Deputy Director of the Division of Bookkeeping and Accounts in the Ministry of State Farms, RSFSR. (Mr. Sultanbaev was one of the two escorts for the USDA team during the tour in the USSR.)
8-22-74	Travel by air from Moscow to Ulyanovsk in the Upper Volga area.	
8-22-74	Ulyanovsk	Oblast Agricultural and Statistical Administration.
		Mr. Lymar, A. O., Administrator of Oblast Agricultural Administration.
		Mr. Drabov, L. E., Administrator of Oblast Statistical Administration.
		Mr. Podatelev, I. F., Deputy Administrator of Oblast Statistical Administration.
		Mrs. Kutoba, I. A., Director, Division of Agricultural Statistics in Oblast Statistical Administration.
8-23-74	Dimitrovgrad	Rayon Statistical Office.
		Mr. Zimin, V. L., Chief of the Office
		Mr. Toptalin, V. V., Head of the Rayon Agricultural Section.
8-23-74	Ulyanovsk	State Farm "22nd Party Congress."
8-23-74	Ulyanovsk	Collective Farm "Victory."
		Mr. Feshin, I. T., Chairman.
		Mr. Bukhurov, E. K., Deputy Chairman.
8-24-74	Ulyanovsk	Oblast Agricultural Administration.
		Mr. Petrushkin, S. A., Deputy Administrator.
		Mr. Batmanov, K. V., Deputy Administrator.

Date	Place	Organizations and Officials
8-24-74	Ulyanovsk	State Agricultural Experiment Station.
		Mr. Kulikov, G. P., Director.
		Mr. Garankov, I. G., Deputy Director.
8-24-74	Travel by air from Ulyanovsk to Moscow.	
8-25-74	Travel by air from Moscow to Kiev, the Capital of the Ukraine SSR.	
8-26-74	Kiev	Ukrainian Ministry of Agriculture.
		Mr. Kravshchenko, I. M., Deputy Minister.
		Mr. Gemets, Chief, Division of Bookkeeping.
		Mr. Vazhegovsky, M. F., Chief, Division of Livestock and Poultry Raising.
		Mr. Ilishchenko, I. K., Chief, Division of Grains and Crop Production.
		Mr. Nikitan, V. I., Deputy Chief, Division of Planning and Economic Analysis.
8-26-74	Kiev	Central Statistical Administration-Ukraine.
		Mr. Vertikov, D. A., Administrator.
		Mr. Artemev, N. N., Deputy Administrator.
		Mr. Paramonov, S. I., Deputy Administrator.
		Mr. Lysenko, I. I., Director of the Division of Agricultural Statistics.
8-27-74	Kiev	Ukrainian Scientific Research Institute on the Economics and Organization of Agriculture.
		Mr. Zhadan, I. I.-Deputy Director for Research and Development.
		Mr. Budutsky, A. A.-Chief, Division of Statistics and Analysis.
8-27-74	Travel by air from Kiev to Kherson which is in the southern part of the Ukraine.	
8-28-74	Kherson	Oblast Agricultural Administration.
		Mr. Zhuravlev, A. I., Deputy Chief.
8-29-74	Kherson	Bereslav RIVS.
		Mrs. Snisarenko, L. V., Director.
		Mrs. Panova, M. I., Deputy Director.

Date	Place	Organization and Officials
8-29-74	Kherson	Collective Farm "21st Party Congress."
		Mr. Barabash, S. F., Chairman of the Farm.
		Mrs. Soroka, A. R., Chief Bookkeeper.
8-29-74	Kherson	Collective Farm "Lenin."
		Mr. Sadovoy, N. K., Chairman of the Farm.
		Mr. Avramenko, N. A., Chief Bookkeeper.
8-31-74	Kherson	Collective Farm "Kirov."
		Mr. Lomonosov, P. I., Chief Agronomist.
		Mr. Verutinov, N. N., Chief Economist.
9-1-74	Travel by air from Kherson to Moscow.	
9-2-74	Moscow	Hydrometeorological Center.
		Mrs. Moiseychik, V. A., Senior Scientific Worker, Candidate of Geographic Sciences.
		Mrs. Razumova, L. A., Senior Scientific Worker, Doctor of Geographic Sciences.
		Mr. Melnik, Yu. S., Candidate of Geographic Sciences, Chief of the Technical Crops Laboratory.
9-2/3-74	Travel by train from Moscow to Tambov in the Central Black Soil Zone.	
9-3-74	Tambov	Oblast Agricultural and Statistical Administration.
		Mr. Dzardonov, V. D., Administrator of Oblast Agricultural Administration.
		Mr. Minin, A. I., Deputy Administrator of Oblast Agricultural Administration.
		Mr. Kamensky, V. I., Administrator of Oblast Statistical Administration.
		Mr. Manyagin, P. N., Director of Oblast Computer Center.
		Mrs. Selezneva, A. S., Director of the Division of Agricultural Statistics in the Statistical Administration.
9-3-74		"Palace of Agricultural Sciences."
		Mr. Kurguzkin, V. N., Director.
		Mr. Biserov, V. A., Deputy Director.

Date	Place	Organizations and Officials
9-4-75	Tambov	State Farm "Arzhenka."
		Mr. Yakunenkov, I. G., Director of the Farm.
9-4-75	Tambov	Raskazov RIVS.
		Mr. Karev, V. M., Head of Rayon Agricultural Office.
		Mr. Yavzaev, A. Ya., Chief of RIVS.
		Mr. Stolbovoy, A. F., Deputy Chief of RIVS.
9-4-74	Tambov	Oblast Complex on Industrial Feeding of Livestock.
		Mr. Iepifanon, L. I., Chairman of the Oblast Specialized Livestock Feeding Association.
		Mr. Isaev, V. V., Head of the Oblast Agroindustrial Complex.
9-5-74	Tambov	Collective Farm "Komintern."
		Mr. Razhin, V. P., Chairman of the Farm.
		Mrs. Kostyrina, L. G., Chief Bookkeeper on the Farm.
9-5-74	Tambov	Michurin Fruit and Vegetable Institute.
		Mr. Minayev, A. P., Director of the Institute.
9-6-74	Travel by train from Tambov to Moscow.	
9-9-74	Moscow	Ministry of Procurement, USSR.
		Mr. Platonov, A. N., Chief of the Planning Department.
		Mr. Posmytni, V., Deputy Chief of the Procurement of Grain Crops.
9-9-74	Moscow	Fourth Moscow Flour Mill.
		Mr. Voevodin, A. V., Director.
9-10-74	Moscow	Ministry of Food Industry, USSR.
		Mr. Rymarenko, V. S., Director of the Agricultural Division.
		Mr. Dykhanov, I. N., Deputy Director of the Agricultural Division.
		Mr. Shadilov, N. M., Deputy Director of the Industrial Division of CSA-USSR.
9-10-74	Moscow	Potato Processing Plant "Koloss."

Date	Place	Organizations and Officials
9-11-74	Moscow	Ministry of Meat and Dairy Industry, USSR.
		Mr. Kornev, K. P., Director of the Planning-Economics Division.
		Mr. Nesterov, M. I., Deputy Chief for Procurement of the Meat and Milk Industry.
		Mr. Nikulin, Yu. P., Member of Foreign Relations Section of the Ministry of Agriculture, USSR.
9-11-74	Moscow	Milk Processing Plant.
		Mr. Khryachkov, M. I., Deputy General Director of the Dairy Association.
		Mr. Soloven, M. I., Deputy General Director of the Dairy Association.
		Mr. Koshelev, L. G., Chief of the Information-Calculating Center of the Dairy Association.
9-12-74	Moscow	Central Statistical Administration, RSFSR.
		Mr. Guzhvin, P. F., Deputy Administrator.
		Mr. Koketkin, M. D., Director of the Division of Agricultural Statistics.
		Mr. Mikhailenko, Eh, I., Deputy Director of the Division of Agricultural Statistics.
		Mrs. Guskova, A. V., Deputy Director of the Division of Agricultural Statistics.
		Mr. Sergeyev, M. I., Deputy Director of the Division of Agricultural Statistics.
		Mr. Boyarkin, A. M., Chief of Inspection (Section for the verification of the work of local statistical units).
9-12-74	Moscow	Main Computer Center, CSA-USSR.
		Mr. Pronin, V. G., Director of the Center.
9-13-74	Moscow	All-Union Institute of Agricultural Economics.
		Mr. Borkhunov, N. A., Senior Scientific Worker.
		Mrs. Egereva, L. I.
9-16-74	Moscow	State Farm "Moskovsky."
		Mr. Peshta, P. N., Chief Bookkeeper.
		Mr. Maydovishch, Eh. N., Chief Economist.

Date	Place	Organizations and Officials
9-16-74	Moscow	Ministry of Agriculture, USSR.
		Mr. Konygin, A. A., Chief of the Division on Scientific and Technical Cooperation with Foreign Countries.
		Mr. Zabazny, P. A., Deputy Chief of Grain Sections.
		Mr. Kovalev, A. T., Representative of Foreign Relations Section of Ministry of Agriculture.
9-17-74	Moscow	CSA-USSR.
		Mr. Kudinov, V. S., Deputy Administrator.
		Mr. Pleshkov, V. I., Deputy Director of the Division of Agricultural Statistics.
		Mrs. Orekhova, G. V., Chief of the Livestock Statistics Branch in the Division of Agricultural Statistics.
		Mr. Dubnov, V. I., Chief of the Collective Farm Statistics Branch in the Division of Agricultural Statistics.

NATIONAL AGRICULTURAL LIBRARY
1022200882

UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

NOTICE: If you don't want future issues of this ERS publication, check here ☐ and mail this sheet to the address below.

If your address should be changed, write your new address on this sheet and mail it to:

Automated Mailing List Section
Office of Plant and Operations
U.S. Department of Agriculture
Washington, D.C. 20250

POSTAGE AND FEI
U.S. DEPARTMEI
AGRICULTU
AGR 101
FIRST CLASS

NATIONAL AGRICULTURAL LIBRARY
1022200882
U.S.MAIL