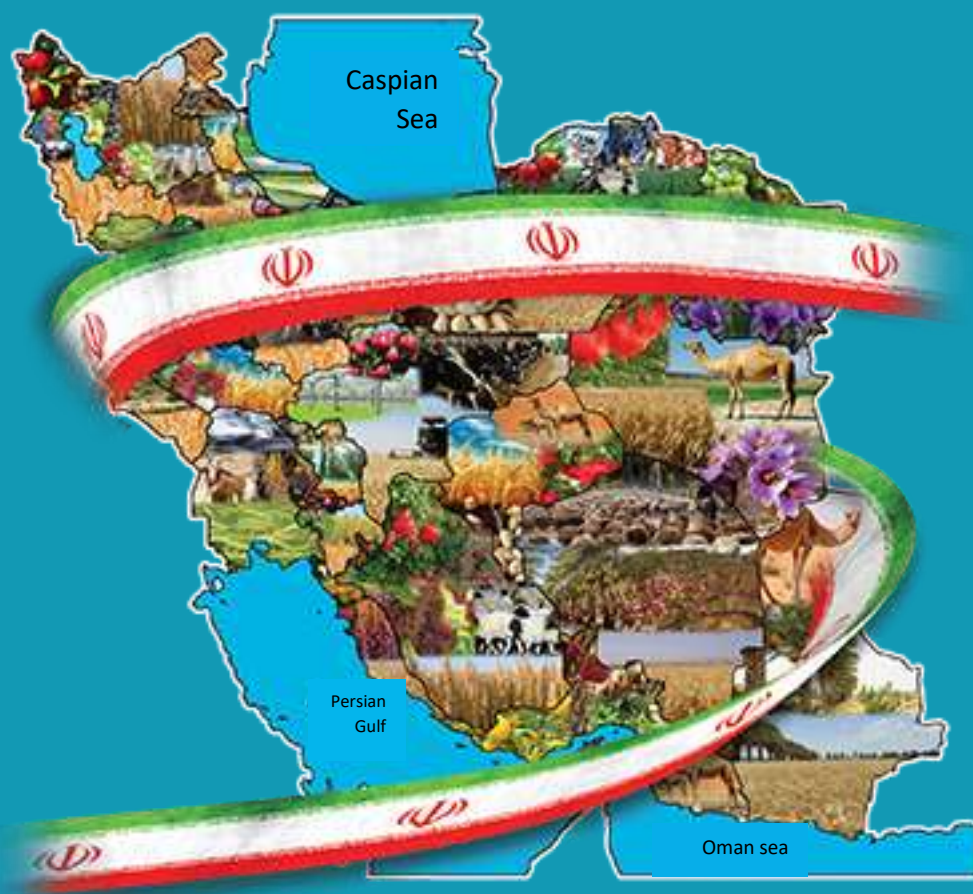


An Introduction to the National Census of Agriculture, 2024



Statistical Centre of Iran

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**Presidency of the Islamic Republic of Iran
Plan and Budget Organization
Statistical Centre of Iran**

An Introduction to the National Census of Agriculture, 2024

The National Census of Agriculture Headquarters Secretariat

Statistical Centre of Iran

Table of contents

Title	Page
Introduction.....	3
What is the National Census of Agriculture?	4
History of the National Census of Agriculture in Iran.....	4
Why is the National Census of Agriculture important?	4
FAO Recommendations on the National Census of Agriculture	5
Objectives of the Census.....	6
Statistical Unit	6
Coverage.....	6
Implementation Date of the National Census of Agriculture	6
Statistical Items	7
Data Collection Methods	7
Use of Administrative Data	7
Establishment of Population Basic Registers of the National Moving Nomads	7
The Comprehensive System of Statistics and Information for National Villages – 2022.....	8
Using the Modern Method of “Remote Sensing” to Estimate the Cultivation Area of Temporary Crops.....	8
The Most Important Measures Taken to Implement the Census of Agriculture of 202	9

Introduction

The global challenges of food security in recent years, which have a direct relationship with the increase in population, water crisis, climate changes, and the shortages of agricultural land under cultivation, have engaged the attention and concern of many countries. The Food and Agriculture Organization of the United Nations (FAO) defines food security as having access to sufficient, safe, and nutritious food that meets everyone's dietary needs and food preferences for an active and healthy life. In this regard, countries address the problems and bottlenecks of food security from two perspectives: increasing production (the productivity of production factors such as improving the yield of agricultural products per area unit, developing agricultural manufacturing units, cultivating in controlled environments, and managing water resources through methods such as replacing less water needed crops and reducing irrigation periods, replanting, crop rotation, planting patterns, and extraterritorial agriculture) and sound management after crop harvesting (including reducing waste and proper product storage, suitable distribution, consumption management, exports, and imports of agricultural products). These efforts have led to significant success in these fields.

On the other hand, the sustainable development of countries has a direct relationship with the provision of raw materials needed by manufacturing industries and the provision of desirable services to the public. In our country, the agricultural sector supplies a significant portion of the raw materials the manufacturing sector needs, such as clothing, bags, footwear, food, and medicine. Additionally, a substantial share of the services sector, including transportation, marketing and distribution, wholesale, and retail, is related to the agricultural sector. Moreover, the employment and livelihood of many people, especially in rural, nomadic, and underprivileged areas, are directly related to this sector.

Furthermore, exports and imports of agricultural products play a significant role in national foreign trade and constitute a substantial portion of the country's foreign exchange requirements.

Considering the importance of the agricultural sector, “proper decision-making”, “precise targeting”, “accurate planning”, “successful implementation”, and “monitoring and evaluation” in this sector require high-quality and timely data at the smallest geographical levels, which can only be obtained through the Census of Agriculture. On the other hand, implementing the sample surveys on large-scale

temporary crops, permanent crops, and livestock farms, which account for over 90 percent of the sector's value-added, requires an up-to-date statistical frame that can be obtained from the Census of Agriculture.

What is the National Census of Agriculture?

Census of Agriculture collects information on various agricultural activities from agricultural holders, including the “cultivation of temporary crops such as wheat, barley, paddy, corn, etc.”, “cultivation of permanent crops such as oranges, apples, dates, grapes, etc.”, “raising of cattle and calves, sheep and lambs, goat and kids, buffaloes and calves, and camels and calves”, “greenhouse planting”, “edible aquatic farming including warm water and cold water fish and shrimp”, “raising of poultry”, “sericulture”, and “apiculture”.

According to the latest Census of Agriculture conducted in 2014, there are more than 4 million agricultural holders in the country, of which 90 percent of their agricultural holdings are in rural areas.

History of the National Census of Agriculture in Iran

Five Censuses of Agriculture have been conducted in Iran so far, in 1973, 1988, 1973 and 2003 using paper tools, and in 2014 using electronic tools such as tablet devices. The results have been published at the level of the smallest geographical units (cities and villages). A comparison of the censuses of agriculture in various countries shows that Iran is one of the leading countries in the Asian region because of the implementation of these five censuses.

Why is the National Census of Agriculture important?

The Census of Agriculture provides important information about agricultural activities throughout the country at the level of the smallest geographical units, which can only be obtained by conducting the Census of Agriculture. Considering that a significant amount of time has passed since the last Census of Agriculture was conducted, and the rapid developments in the agricultural sector during this period, implementing the Census of Agriculture in 2024 is deemed an unavoidable necessity. Some additional reasons that implementing the Census of Agriculture in 2024 even more necessary are as follows:

- As per Article 3 of the Law of the Statistical Centre of Iran and Article 10 of the Law of Permanent Decrees of the National Development Plan (February

2016), the Census of Agriculture must be conducted in the autumn of 2024 to maintain the time series of statistics for the agricultural sector and update information on agricultural holders.

- According to the Food and Agriculture Organization of the United Nations (FAO), the Census of Agriculture should be conducted at intervals not exceeding ten years. In certain countries, including the United States, Japan, China, and Canada, the Census of Agriculture is carried out every five years.
- The Census of Agriculture is the second-largest national statistical survey and the most significant statistical activity within the agricultural sector.
- The information obtained from this Census provides frame needs, and the basic statistics of this sector are presented at the smallest geographical unit required by the Statistical Centre of Iran, the Ministry of Jihad-e-Agriculture, organizations responsible for market regulation, as well as planners and researchers.
- To develop a sound plan in the agricultural sector, accurate and timely information is essential at both the village and city levels. This information can only be obtained through the Census of Agriculture.
- Agricultural sample surveys, particularly household and large-scale surveys—such as those for permanent crops, temporary crops, livestock farming, and specialized economic accounts (like the input-output table)—are conducted using the census frame. The results of these surveys indicate that the changes made to the Census of Agriculture frame in 2014 have led to an increase in sample errors in recent years.
- Irregular implementation of the census will disrupt the time series and result in errors in predictions based on the time series.

FAO Recommendations

Every ten years, the statistics department of the FAO presents a compilation of its recommendations, methodologies, and suggestions to countries worldwide through a program known as the “World Programme for the Census of Agriculture.” These programs are developed during numerous meetings with experts from member countries and are regarded as essential documents. The most recent program is the “World Programme for the Census of Agriculture 2020,” which includes important recommendations and guidelines.

Objectives of the National Census of Agriculture

1. Preparation of a statistical frame for sample surveys
2. Production of structural information at small geographical levels that can be presented in multidimensional classifications.
3. Providing totals and overall information to measure inter-census estimations

Statistical Unit

An agricultural holding is the statistical unit proposed by FAO for the implementation of the Census of Agriculture. The FAO definition of “agricultural holding” is almost similar to the definition used in Iran's agricultural surveys.

Coverage

According to the FAO's recommendations, the Census of Agriculture should encompass all agricultural holdings across the country, including urban areas.

Frame

The list of agricultural holdings available in administrative registers (without missing or duplications, has proven to be extremely useful as a census frame. All countries are recommended to provide the necessary facilities and equipment to produce such frames. For the upcoming Census of Agriculture, information on agricultural holders and holdings available in the Ministry of Jihad-e-Agriculture (including the Nomads Affairs Organization of Iran, the Iran Veterinary Organization, and the Communication and Information Technology Centre) has been collected and utilized to prepare a list of holders for several villages and cities. More than 17 million households reside in these villages and cities.

Implementation Date of the National Census of Agriculture

FAO's global program emphasizes that between 2015 and 2024, countries should prioritize the inclusion of at least one Census of Agriculture in their agricultural statistical activities agenda. The program recognizes that countries differ significantly in terms of economic development and statistical capabilities. Consequently, the FAO encourages countries to tailor the program to their specific circumstances, implementation methods, and national concerns.

Statistical Items

Various statistical items have been proposed for inclusion in the questionnaire for agricultural holdings. Some of these items, such as the specifications of the holder, the area of agricultural land (including arable land, orchards, and nurseries), the names of agricultural products, the cultivation area of temporary crops, and the number and sex of different types of livestock, have been emphasized by the FAO.

Data Collection Methods

The examination of international documents, such as those from the FAO, alongside data from various countries, reveals that nearly all nations employ traditional data collection methods. These methods include distributing questionnaires for respondents to complete, conducting face-to-face interviews with households by enumerators, and allowing the completion of questionnaires online or via phone. Additionally, countries frequently use census data to establish the census frame and monitor census coverage.

Use of Administrative Data

Countries often use census data to compile the census frame and ensure comprehensive coverage. In Iran, administrative and register data have been used to create a list of agricultural holders in various cities and villages across the country. This method utilizes available data sources, including the "Zoning and Agricultural Data Management System of the Ministry of Jihad-e-Agriculture," data available in the Statistical Centre of Iran, the data obtained from the "National Moving Nomads Population Base Registers," and other available data sources. As a result, a list of agricultural holders in 675 villages and 369 cities, encompassing more than 17 million households, has been compiled and updated. The information about these holders is collected in the current census through face-to-face or telephone interviews.

Establishment of Population Basic Registers of the National Moving Nomads

The social composition of Iran's population consists of three communities: urban, rural, and nomadic. Approximately 30 percent of the nation's small livestock is raised by the nomadic community, highlighting its significant and influential role in red meat production in the country. To identify the households of nomadic communities, three censuses were conducted in 1987, 1998, and 2008. Aiming to transform the approach to collecting statistics and information from the traditional method to a register-based one, the Statistical Centre of Iran, in collaboration with

the Nomads Affairs Organization of Iran, conducted preliminary studies to assess the feasibility of collecting essential information from the households of nomadic populations across the country. After designing the relevant system and collecting the associated data in 2019, population registers for national nomads were established by integrating more than 14 national information databases. The results were published at the national level in 2021. The implementation of this significant project not only reduced costs but also enabled the timely updating of information at specific intervals. The data obtained from this register has been used to compile a list of agricultural holders in selected cities and villages.

The Comprehensive System of Statistics and Information for National Villages – 2022 (located in the Vice Presidency for Rural Development and Underprivileged Areas)

In the 60th session of the High Council of Statistics, the Vice Presidency for Rural Development and Underprivileged Areas was tasked with developing the National Villages Information System to record data on villages across the nation. This initiative was launched in collaboration with the Statistical Centre of Iran. During the first stage of development, information on more than 200 statistical items was collected for 75,000 out of 98,000 villages throughout the country. In the second stage, the collected data needed to be verified against the records of relevant government agencies. However, progress in this stage has been slow due to the lack of cooperation from the responsible organizations in providing the necessary information.

Using the Modern Method of “Remote Sensing” to Estimate the Cultivation Area of Temporary Crops

The classic methods of collecting agricultural statistics have several shortcomings, including a significant delay between data collection and information dissemination, a high incidence of errors, substantial costs, and a considerable burden on respondents. With the emergence of new technologies, traditional methods must be reviewed and updated. One such technology is the estimation of cultivation levels and agricultural production through the use of remote sensing methods. To explore these technologies, the research project titled Wheat and Barley Cultivation Area in the Varamin Sub-province of Tehran Province was conducted in 2021, employing both remote sensing and sample survey methods. The results of this Survey indicated that modern techniques can accurately estimate cultivation areas and predict production with acceptable precision and minimal cost. While these technologies

cannot replace agricultural censuses, the data obtained from these surveys can serve as accurate and reliable data to validate census data at the macro level, estimate cultivation levels and predict the production of both temporary and permanent crops before harvest.

The Most Important Measures Taken to Implement the Census of Agriculture of 2024

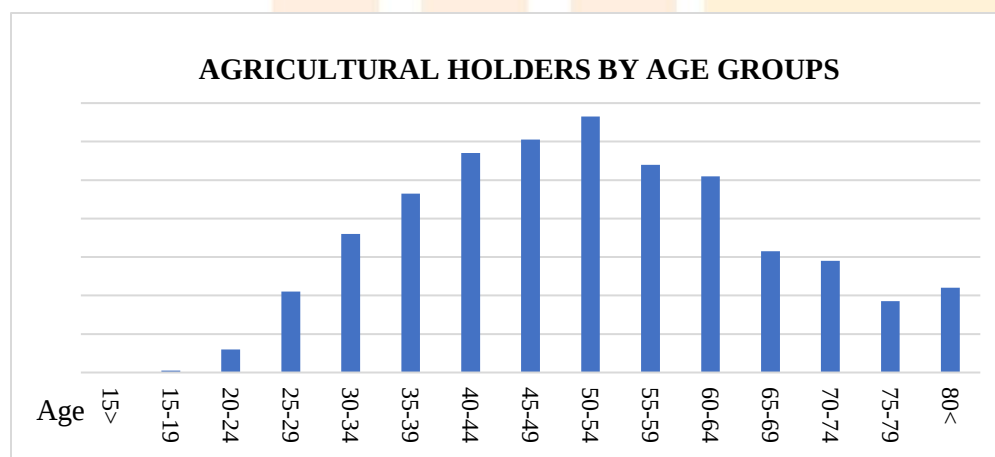
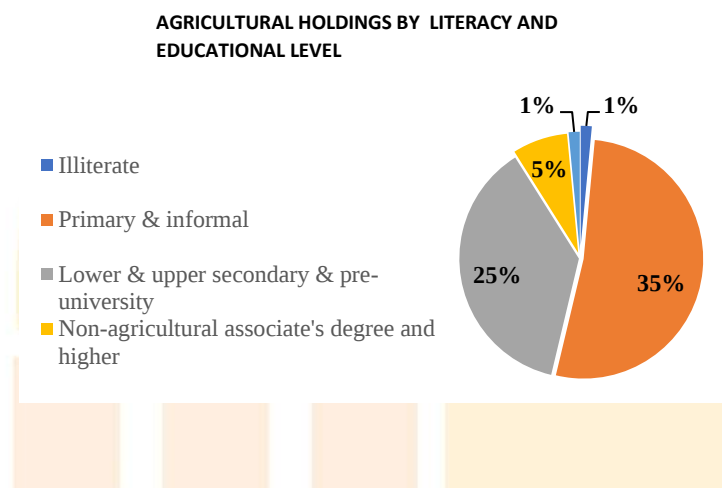
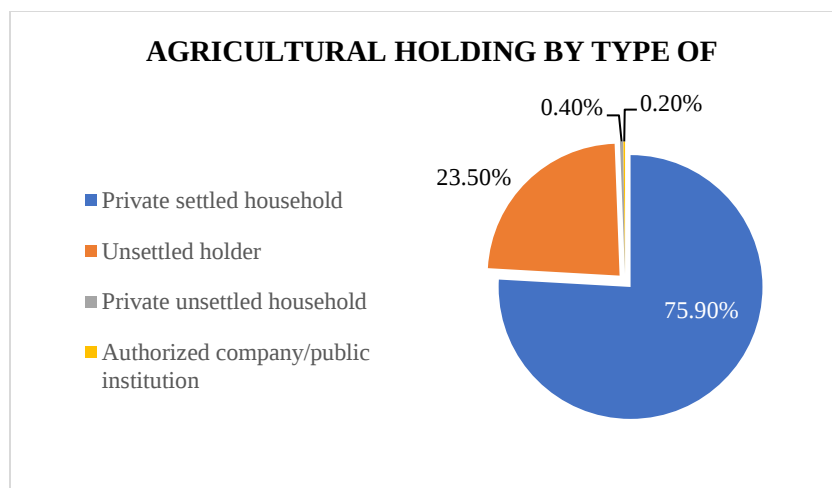
- Reviewing and analyzing the previous Census of Agriculture;
- Studying the Census of Agriculture in selected countries;
- Obtaining approval for the implementation of the Census of Agriculture for 2024 from the High Council of Statistics;
- Implementing the first phase of updating and integrating the establishment units with ten key activities of the agricultural sector at the smallest geographical level (agricultural holdings in Iran include household and establishment units). Although establishment units are few in number, they contribute significantly to the production of agricultural products;
- Using administrative and register data sources to compile a comprehensive list of agricultural holders in large cities and villages (over 17 million households reside in these cities and villages across the country) In addition to enhancing accuracy, this method has led to substantial cost savings for the census;
- Conducting a needs assessment of statistical items from the Ministry of Jihad-e-Agriculture and Management and Planning Organization in Provinces;
- Designing census questionnaires in both electronic for tablets and paper methods;
- Preparation and compilation of the enumerator's guidebook, control instructions, data correction and extraction, and aggregation;
- Conducting additional studies to reduce the number of statistical items from 700 to 280 and exploring the feasibility of using personal mobile phones as data collection tools.
- Designing both offline and online versions of data collection software.
- Developing a census training plan having similar training for operational groups.
- Preparing plans for monitoring, post-enumeration, and publicity.

- Updating statistical maps and delineating census areas.

Key dates for the National Census of Agriculture, 2024

Line No.	Description	Start	End
1	First stage training (hybrid)	2024.09.23	2024.09.30
2	Second stage training	2024.10.13	2024.10.17
3	Third stage training	2024.10.21	2024.10.27
4	Census implementation	2024.11.02	2024.12.16
5	Post-enumeration	2024.12.25	2025.01.02
6	Checking and verifying Census data files	2025.01.20	2025.02.28
7	Preliminary results implementation across the country	2025.05.05	2025.05.20
8	Checking and verifying detailed results of the country	2025.06.05	2025.06.21

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Source: 2014 National Census of Agriculture