Selected Census Results of the Layer Chicken Farms, the Year 1391

Vice –Presidency for
Strategic Planning & Supervision
Statistical Centre of Iran

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1. Iranian year begins on March 21st of the Christian year and ends on March 20th of the next year. To convert the Iranian year into Christian year, please add 621 to the former.
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Preface

The survey on modern chicken farms which include two important industries: raising broiler chickens and raising layer chickens was conducted in the year 1391¹. In this Survey, the last available list of national chicken farms in Iran which was prepared in the year 1388 for broiler chicken farms and in the year 1390 for the laying chicken farms was used. For this Survey 8365 man/day enumerators, 1694 man/day checkers, 2091 man/day executive group leaders, 775 man/day experts, and 4182 man/day cars with driver were used. The Offices of General Governors in all provinces were in charge of carrying out the Survey in their provinces. This Survey started on 3 Tir 1391² and finished on 26 Tir 1391³. The designed software was used to extract and disseminate the results of this Survey in a decentralized way.

In line with its duty to produce the basic information and statistics and in order to meet the statistical needs of the users, the Statistical Centre of Iran (SCI) began The Survey on the Layer Chicken Farms in the year 1364 and continued it for the years 1370, 1373, 1375, 1378, 1380, 1382, 1385, 1388 and 1390.

Hereby, we acknowledge all colleagues in the Departments of Statistics and Information of General Governor Offices in the country who were responsible for implementing the Survey, and also unions and cooperatives of chicken farms as well as the holders who had sincere and great cooperation in this survey.

At the end, we hope the provided information may prove useful to the decision makers, planners and researchers in the chicken farms industry.

Statistical Centre of Iran

¹. Iranian year begins on March 21st of the Christian year and ends on March 20th of the next year. To convert the Iranian year into Christian year, please add 621 to the former.
². June 24, 2012
³. July 16, 2012
Introduction

Chickens raising in a modern way in Iran started through importing one-day-old chickens or fertile eggs from breeding chickens in the year 1333. This industry has been so developed that today it produces significant portion of national animal protein. At the present time different units of chicken farms are developed in different parts in the country.

Poultry raising industry in Iran includes six main activities as: rearing great grandparents stock, grandparents stock; parents stock; production of one-day-old chickens, layer chicken, broiler chicken, and poultry (which is considered as a side activity). Obtaining information on the activity of the layer chicken farms is very important because the final and main product of these farms is egg which, as an important protein and nutritional food, plays an important role in supplying certain animal protein required in the country.

This survey provides the researchers and planners with the information and statistics on the number of layer chicken farms, activity status, hall status, capacity, legal status, the status of layer chicken flock, quantity and quality of products, quantity and quality of consumed hen feed, and the number of employed persons.
Main Characteristics of the Survey

Survey History:

With respect to the importance of statistics and information in planning the SCI conducted this survey in the years 1364, 1370, 1373, 1375, 1378, 1380, 1382, 1385, 1388 and 1390 and disseminated their results.

Main Objectives:

The general objectives of this survey are:

1. To collect information needed by the Office of National Accounts

2. To produce and disseminate the statistical information for better understanding of different aspects of this activity in order to better planning and economic reviews of the poultry industry in the country.

Survey Method:

Census method

Statistical Population:

The statistical population in this survey is all the layer chickens farms in the year 1391.

Statistical Unit:

The statistical unit in this survey is a chicken farm involving in rearing layer chickens.

Statistical Frame:

The statistical frame for this survey includes all layer chickens farms in urban and rural areas resulted from the updated list of the chicken farms for raising layer chickens in the year 1390.

Survey Date:

Tir 1390

Statistical Date:

The statistical date, depending on the case, is the day or the year of enumeration namely the year 1390.

Level of Dissemination of Results

The results of this survey are disseminated at provincial level.

Definitions and Concepts

**Layer Chicken Farms**

This chicken farm is an agricultural product unit in which flocks of breeding layer chickens for producing edible egg are raised.

**Layer Chicken**

Includes those chickens on which breeding operation are done just for producing edible eggs.

**The Capacity of Layer Chicken Farms (Cage System)**

In the layer chicken farms, the flocks of layer chicken are kept in the cages. The cages are classified according to the shape, type, size, number of floors, etc. The capacity of the layer chicken farms is the number of chickens kept in the cages.

**Breed**

Breed means the hens and roosters that are able to transfer their genetic characteristics without any change to their offspring, like Plymouth-Rocks, Cornish, and Ross. In this survey, the word “breed of the chicken” is so-called word which chicken keepers use and usually refers to the foreign companies and institutions which have a monopoly on special breed of great grandparents stock such as breeds of Babcock, Shiyor, Hy-line, and Hy- Sex.

**Same-Age Flock**

In the layer chicken farms, all pullets and egg-laying hens of a breed which are entered into the chicken farm simultaneously or in a short time interval are reared in the same condition.

**Shell-Less Eggs**

Eggs lacking the hard outer shell.

**Loss**

Death or annihilating of unusable hens and roosters due to disease during productivity period.

**Cull**

Chicken (hens and roosters) that are culled for various reasons (disease, weakness, product deficiency,..) or delivered to slaughterhouses at the end of raising period. It is necessary to mention that the meat of culled hens and roosters can be used.
Important findings

The Number of Layer Chicken Farms

The results of this survey show there were 1350 chicken farms raising layer chicken in the country out of which a number of 1133 chicken farms were operative and 217 units were inoperative. The provinces of East Azarbeyjan, Khorasan-e-Razavi, and Qom had the highest number of chicken farms in comparison with other provinces.

Activity Status of Layer Chicken Farms, the Year 1391

Number and Capacity of the Poultry Halls

The results show that there were 4358 halls with 71 million layer chickens in the layer chicken farms in the country out of which 590 halls had full automatic cage system with the capacity of 14 million chickens, 2577 halls had semi-automatic cage system with the capacity of 44 million layer chickens, and 1191 halls had simple cage system with 13 million layer chickens.

The Number of Layer Chickens and the Number and Value of Pullet in the Hall

The results of the survey show that in the beginning of the year 1391 there were 28 million layer chickens and 25 million pullets with the value of 1686 billion Rials in the halls of chicken farms. In the end of the year 1390, there were about 15 million layer chickens and 24 million pullets in the halls of chicken farms.
The Quantity and Value of Production

In the year 1390, the quantity and value of production of layer chicken farms were 559 thousand tons edible eggs (including shell-less egg) with the value of 12132 billion Rials, 16 thousand pullets with the value of 181 billion Rials, and 397 thousand tons manure with the value of 127 billion Rials. It is necessary to mention that according to the reviews and information obtained from the completed questionnaires of the survey, the provinces of Tehran, Qazvin, and Qom experienced decrease in the production of edible egg and shell-less egg due to the bird flu epidemic in the beginning of the year 1390 in comparison with the preceding year.

The Value of Products of Layer Chicken Farms, the Year 1390

![Pie chart showing the distribution of value of products in layer chicken farms.]

The Quantity and Value of Feed Consumed by Chicken

The total feed consumed by the layer chickens in the year 1390 was more than 1.2 million tons. Moreover, the value of this consumed feed was 8249 billion Rials out of which 284 billion Rials was for other feed consumed by the layer chicken.
The Value of Feed and Other Consumed Feed in the Layer Chicken Farms

Number of Employees and Paid Salaries

The number of workers in the layer chickens farms in the year 1390 was 9478 out of whom 8324 were paid workers and 1154 were unpaid workers. The paid workers included 7818 males and 506 females and unpaid workers consisted of 1141 males and 13 females. The amount of paid salaries and other payments to the workers of the mentioned chicken farms were 521 billion Rials in the cited year.

Important Notes

1. The review of the time series information of layer chicken farms shows there was an 18% decrease in egg production in the year compared to the previous year due to the bird flu outbreak in the first half of the year 1390 in the leading provinces which possess the greatest shares in egg production. The provinces of Tehran, Qazvin, and Qom experienced a 53% decrease (about 137 thousand tons) due to the mentioned disease.

2. During the survey, 73 chicken farms were not surveyed due to the noncooperation or inaccessibility of the informed respondent. The capacity of these chicken farms was 3 million chickens and their egg production was 37 thousand tons in the year 1390. It is recommended that the users consider these missing figures in their own researches.
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Changes in the Number and Activity Status of Layer Chicken Farms, the Years 1370-1391

![Graph showing changes in the number and activity status of layer chicken farms from 1370 to 1391. The Y-axis represents the number of farms (100s), and the X-axis represents the years 1370 to 1391. The graph includes data for total chicken farms, operative chicken farms, and inoperative chicken farms.]

Changes in the Edible Egg Production in the Layer Chicken Farms, the Years 1374-1390

![Graph showing changes in the edible egg production from 1374 to 1390. The X-axis represents the years 1374 to 1390, and the Y-axis represents egg production in tons (100,000s). The graph includes data for all years within the range.]
Changes in the Number of Layer Chicken Farms' Halls, the Years 1370-1391

1. Number and Activity Status of Chicken Farms, the Years 1370-1391

<table>
<thead>
<tr>
<th>Description</th>
<th>1370</th>
<th>1375</th>
<th>1378</th>
<th>1380</th>
<th>1382</th>
<th>1385</th>
<th>1388</th>
<th>1390</th>
<th>1391</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>881</td>
<td>1023</td>
<td>1270</td>
<td>1321</td>
<td>1339</td>
<td>1350</td>
<td>1380</td>
<td>1350</td>
<td>1350</td>
</tr>
<tr>
<td>Operative chicken farms</td>
<td>698</td>
<td>955</td>
<td>1190</td>
<td>1102</td>
<td>1012</td>
<td>1042</td>
<td>1210</td>
<td>1112</td>
<td>1133</td>
</tr>
<tr>
<td>Inoperative chicken farms</td>
<td>183</td>
<td>68</td>
<td>175</td>
<td>304</td>
<td>402</td>
<td>390</td>
<td>170</td>
<td>238</td>
<td>217</td>
</tr>
</tbody>
</table>
2. Edible Egg Production in the Layer Chicken Farms, the Years 1374-1390 (Tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1374</td>
<td>411131</td>
</tr>
<tr>
<td>1377</td>
<td>434615</td>
</tr>
<tr>
<td>1379</td>
<td>506192</td>
</tr>
<tr>
<td>1381</td>
<td>571017</td>
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<tr>
<td>1384</td>
<td>576478</td>
</tr>
<tr>
<td>1387</td>
<td>725367</td>
</tr>
<tr>
<td>1389</td>
<td>686531</td>
</tr>
<tr>
<td>1390</td>
<td>558659</td>
</tr>
</tbody>
</table>

3. Layer Chicken Farms by Activity Status, the Years 1390-1391

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
<th>Operative</th>
<th>Inoperative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>The year 1390</td>
<td>The year 1391</td>
</tr>
<tr>
<td>Total country</td>
<td>1350</td>
<td>1112</td>
<td>1133</td>
</tr>
</tbody>
</table>

4. Capacity of the Layer Chicken Farms by Activity Status, the Years 1390-1391 (Fowl)

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
<th>1391</th>
<th>Total</th>
<th>1390</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Operative</td>
<td>Inoperative</td>
<td>Operative</td>
</tr>
<tr>
<td>Total country</td>
<td>71113421</td>
<td>62207891</td>
<td>8905530</td>
<td>71113421</td>
</tr>
</tbody>
</table>
5. The Number and Capacity of Halls with Different Types of Cage Systems, the Year 1391

<table>
<thead>
<tr>
<th>Description</th>
<th>Full automatic</th>
<th>Semi-automatic</th>
<th>Simple cage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of halls</td>
<td>Cage capacity</td>
<td>Number of halls</td>
</tr>
<tr>
<td>Total country</td>
<td>590</td>
<td>13970890</td>
<td>2577</td>
</tr>
</tbody>
</table>

6. The Quantity of the Different Types of Products, the Year 1391, (Ton)

<table>
<thead>
<tr>
<th>Description</th>
<th>Edible Egg (shell-less eggs)</th>
<th>Culled chickens</th>
<th>Manure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total country</td>
<td>558659</td>
<td>16315</td>
<td>397089</td>
</tr>
</tbody>
</table>