



# Statistical Capacity Building for Agricultural and Rural Statistics in Iran and Training Needs Assessments

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#### **Introduction of SRTC**



To meet the research and training needs and scientific enquiries about statistical subject, particularly national statistical system, Statistical Research and training Center (SRTC) has been established since 1999.



#### **Introduction of SCI**



The Statistical Centre of Iran (SCI) as the Unique authority of the country's official statistics is an intelligent organization enjoying a pivotal role in policy-making and directing the production of the country's official statistics, as well as providing the statistical data required by the users.

The main objectives of SCI is to provide the necessary information for calculation of the value added in different economic sectors, price indices, characteristics of economic, social, health and etc.

Generally agricultural survey conducted by SCI and Ministry of the Jihad-e-Agriculture conducted 3 different types:

**□**Census

☐Sampling survey

☐ Register based

National statistical system in Iran is a **semi-centralized** system. According to the law, SCI is responsible to produce and coordinate statistical information in the country. There are also other organizations which produce statistics related to their own field of work such **as Central Bank of I.R. of Iran** and **Ministry of the Jihad-e-Agriculture.** 

# **Agriculture Statistics Produced by SCI**



No.	Name of Survey	Year	Census:1 Survey:2	ORG
1	General Census of Agriculture	1988, 1993,2003,2014	1	SCI & M.J.A
2	Census of Socio-Economic of Nomadic People (tribe/clan)	1987, 1998, 2008	1	SCI
3	Livestock	2005, 2008, 2011	2	SCI
4	Permanent Crops	1993, 2007, 2010	2	SCI
5	Rural agriculture	1973-1978	2	SCI
6	Agriculture activities in rural areas	1960, 1977, 1982, 1987	2	SCI
7	Modern poultry farms (broilers, layers, parent stocks & hatcheries)	1985, 1986, 1991, 1992, 1994, 1996, 1999, 2001, 2003, 2006, 2011, 2012	1, 2	SCI
8	Modern cow farms	1990,1994,1996,2000,2007, 2010, 2013	1,2	SCI
9	Units of rearing mushroom	2001, 2006	1	SCI
10	Animal slaughtered by abattoirs	1968-2013 (annually)	1	SCI
11	Ornamental plants and flowers	1997, 2001	2	SCI

# The Iranian National Census of Agriculture



Implementation of the Fourth Iranian National Census of Agriculture is scheduled to be carried out from 27 September to 9 November 2014.

The **previous censuses** were undertaken in the years **1988**, **1993** and **2003**. The Statistical Centre of Iran (SCI) is responsible to take this Census in collaboration with other government agencies according to the decree of the President of the I.R. Iran.

Ministry of the Jihad-e-Agriculture as the main user of the statistics obtained in this Census has a close collaboration with the Census working groups and operational staff and supports the SCI in the Census implementation.

According to the Law the National Census of Agriculture is taken decennially.

# The Iranian National Census of Agriculture



In order to review the probable problems and challenges of the Census and finding suitable solutions for tackling them,

The **first phase of the pilot census: 2012** in three provinces.

The **second phase of the pilot census: 2013** in 31 rural agglomerations of 31 provinces of the country and also in five selected cities.

Method for data collection: face-to-face interview, TABLET Device.

using tablet instead of paper questionnaire is an important innovation for increasing accuracy and precision of the collected data and decreasing the time lag between the data collection and the results dissemination. All **editing operations** are done by the enumerators themselves.

In this Census, we have focused on main census objective, namely frame constructing for sample surveys such as **livestock survey**, **permanent crops survey** and **temporary crops survey** which can satisfy the statistical needs of planners and researchers.

# National Strategy for Development of Statistics 2011–2015



- Holding at least 100 professional training courses and workshops for the provincial and national government agencies' employees and holding at least 10 international and regional training courses in the field of different statistical activities
- Vice-Presidency for Management Development and Human Capital is duty-bound to ratify and notify the professional training courses needed for employees of the statistical units of government agencies in cooperation with the SCI and government agencies no later than the end of the second year of the NSDS. The courses shall be revised annually if necessary. Training needs assessment survey will be conducted by the SCI and the related government agencies.

#### **National Strategy for Development of Statistics 2011–2015**



- The Ministry of Science, Research and Technology is duty-bound, according to the suggestion of the SCI, to develop the academic training of official statistics appropriate to practical needs especially in the fields of national accounts and price indices at bachelor's degree level in economics and create the mentioned course at MA's degree level while creating official statistics as sub-discipline under statistics major field of study.
- The Ministry of Foreign Affairs is duty-bound to provide facilities needed for development of regional and international cooperation as well as efficient and active participation of the organs of national statistical system in regional and international statistical forums, seminars, and training courses.
- The Statistical Research and Training Centre is duty-bound to develop a database of researches, held training courses, organizers, and lecturers active in official statistics by the end of the second year of the NSDS and update it during this Plan.

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# **Steps to Training Needs Assessment Survey**

Creating Committee for Education Statistics in the structure of the National Statistics Plan
<ul> <li>Education Committee members include:</li> <li>□ Representative of the Iranian Statistical Center (SCI)</li> <li>□ Representative of the Office of Education of SCI</li> <li>□ Representatives of Statistics offices of selected Ministry recommended by Special Commission of high Council Statistics</li> </ul>
Prepare a preliminary list of required training courses based on classification of audience
<b>Send preliminary list to</b> ministries and other government agencies for announce the other needs

# **Steps to Training Needs Assessment Survey**



☐ Ratify final list by the Education Committee of National Statistics Plan
□ Notify final Training course by the Vice-Presidency for Management
Development and Human Capital
☐ Update the list of Training courses based on nomination of Statistics
Research Council
☐ Evaluation of course evaluation form completed by participants in training
courses
☐ Designing new courses:
according to the results of research projects in SRTC such as Outlier
detection course that was extracted from the results of a research
project
offered by University Professors
offered by ministries and other government agencies
☐ Holding Special meetings in conferences



#### **Conferences and seminars:**

The SRTC holds academic conferences and seminars, according to its mission. Some of them are (since 2008):



- analysis of 2006 census findings
- analysis of immigration statistics
- family census and sampling
- half a century with household economy
- analysis of Iranian population trends
- statistical methods and benefits for governing
- analysis of census findings 2011



#### **Training Courses**

The SRTC provides a variety of different types of courses in cooperation with the researchers from other institutes, universities and also international statistical organizations such as: SIAP, ECO, and UNSD. SRTC has held more than 300 courses and workshops in national and international levels.









#### Some of these courses are listed as follows:

#### **SOFTWRAE TRAINING**

- □Statistical packages like: SAS,S-PLUS,R,WinBugs,STATA,SPSS,AMOS,Matlab
- □ Variance Estimations in Complex Survey with R Software
- □ Application R Software in Demography Data Analysis
- □analysis of structural equations with AMOS & LISREL
- □Longitudinal Data Analysis with SAS Software
- Multivariate Analysis with S-Plus
- ■Multilevel Analysis with R
- □ Econometric by Eviews





#### **OFFICIAL STATISTICS**

- Official Statistics
- Quality Management in Statistics Production
- Introduction to Principle and Methods of Statistical Surveys
- Labor Force Analysis
- Main Challenge in Programming System of Iran and New Approaches
- New Standard in Labour Force
- Sampling Methods in Agriculture Statistics
- Register Statistics
- National Systems Accounts
- Statistics and Evidence Based Management
- Quality Management in Statistics Production, Statistical Report Making
- Register Based Census
- Methods of Mortality Data Analysis



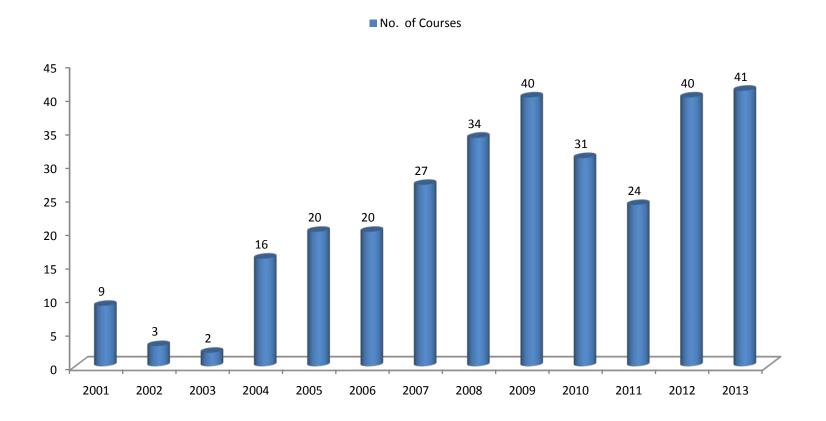
#### STATISTICAL METHODOLOGY

- Robust Statistics (Principle, Methods)
- Applied Time Series
- Multilevel Analysis and it's Application
- Shape Analysis and its Application
- State- Space Modeling
- Game Theory (An Application in Economics)
- □ Research Methodology in Measurement and Assessment
- Sampling and its Application in Industrial Company
- Regression Modeling in Uncertainly
- Editing and Imputation Methods
- Data mining



On 2013, 41 training courses attended by 1000 participants.

Participants are from SCI, Universities, Foreign Country and Government Agencies.







- □ Sub-Regional workshop on survey sampling method and applications in collaboration with SIAP (1999).
- Training Course on category Data Analysis in collaboration with Iowa University (2000).
- Country Course on Statistics for National Development Reports in collaboration with SIAP/ UNESCAP (2000).
- Second Training Course on Sampling Methods Design and Applications in collaboration with SIAP/ UNESCAP (2001).
- Small area Estimation in collaboration with UNDP.



- □ Sub-Regional workshop on Intermediate sampling Design and applications in collaboration with SIAP
- ☐ First sub-regional course/ workshop on Statistics relating to MDGs Indicators (2005).
- □ The 11th sub-regional courses/workshop on sample design for household, establishment and enterprises workshop in collaboration with SIAP (2005).
- □ The 12thsub-regional courses/workshop on sample design for household, establishment and enterprises workshop (2006).



- ☐ The First regional training course on disability and health statistics in collaboration with SIAP (2006).
- sub-regional course/workshop on MDGs Indicators in collaboration with SIAP (2007).
- Workshop Informal Sectors for ECO State Members (2007).
- The 13th sub-regional courses/workshop on sample design for household, establishment and enterprises workshop in collaboration with SIAP (2008).



- ☐ First Meeting of the NSO's Heads of the ECO Member States (2008)
- First Meeting of High Level Experts of NSOs In ECO Region (2008).
- □ Sub-regional Course/workshop on New Challenges in Economic Statistics in collaboration with SIAP/UNECE, (2008).
- Country Course on Environmental Statistics in collaboration with SIAP, (2008).
- Workshop on Spatial Information (GIS) Use in Data Dissemination for ECO Countries, (2009).



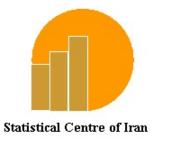
- Workshop on SNA for ECO Countries (2009).
- Workshop on ECO Statistical Network, (2010).
- Country Course on Statistical Database in Collaboration with SIAP (2010).
- Holding Regional Training Workshop on Statistical Quality Management and Fundamental Principles of Official Statistics: National Quality Assurance Frameworks, 2012, in Collaboration with SIAP.



- Holding Regional Training Workshop on Implementation of the System of National Accounts (SNA) 2008 in collaboration with UNSD, ECO & SCI for ECO countries (2012).
- Holding Country Course on Promoting Statistical Literacy in Iran in collaboration with New Zealand Statistics, (2012).
- Holding Second RAP Regional Workshop on Building Training Resources for Improving Agricultural and Rural Statistics: Sampling Methods for Agricultural Statistics Review of Current Practices in collaboration with SIAP (2013).



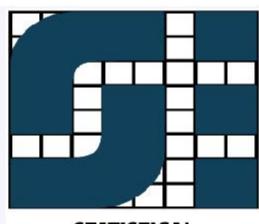
- Holding Regional Workshop on New International Standards on Statistics of Work and Labor Force with applications to sex and age aggregated data For ECO Member Countries in collaboration with ECO and UNFPA (2013).
- □ Holding Second RAP Regional Workshop on Building Training Resources for Improving Agricultural and Rural Statistics: Sampling Methods for Agricultural Statistics Review of Current Practice in Collaboration with SIAP (2013).
- Holding Regional Workshop on Science, Technology and Innovation (STI) Indicators in collaboration with ECO and UIC of UNESCO (2013).



# Thank you

# www.amar.org.ir, www.srtc.ac.ir





STATISTICAL RESEARCH AND TRAINING CENTER