

1390 National Census of Population and Housing

The Technical Report

With Collaboration of:

Taha Nourolahi

Zabyolah Ghaemi

Hamid Moazzami Goodarzi

Ozra Naeneeni

Shirin Jafari

Samaneh Ghaderi

Khadijeh Karimi

Mohammad Reza Rayhani

Akram Rasoli

Daryosh Mohammadi

Sadigheh Mirzaee

Arash Fazeli

Neda Mostafavi

Sodabeh Zerbarjad

Nourmohammad Javeed

Marjan Mirzakhali

Mehdi Vahdati

Alireza Asgari

Parva Tadaion



STATISTICAL
RESEARCH AND TRAINING
CENTER

**Technical Design and Statistical
Methods Research Group**

2013

Users Guide

Iranian calendar vs Gregorian calendar

Iranian year	1370	1375	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390
Christian year	1991-1992	1996-1997	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	200-2009	2009-2010	2010-2011	2011-2012

Iranian months

Farvardin
Ordibehesht
Khordad
Tir
Mordad
Shahrivar
Mehr
Aban
Azar
Dey
Bahman
Esfand

Christian months

21 March- 20 April
21 April- 21 May
22 May- 21 June
22 June- 22 July
23 July- 22 August
23 August- 22 September
23 September- 22 October
23 October- 21 November
22 November- 20 December
22 December- 20 January
21 January- 19 February
20 February- 20 March

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

Preface

The technical report on the 1390 National Census of Population and Housing contains a coherent collection of the technical methods employed in all the census's stages ranging from planning to the publication of the results in order to satisfy the needs of such users as planners, policy makers, researchers, students, and the interested individuals as well as those who will be involved in designing and conducting the future censuses.

The present collection introduces the technics used in the 1390 Census including those applied in the Pilot Censuses together with the concepts and procedures tested in these experiments.

Today, in many countries throughout the world the census technical report designing committees in cooperation with the other working groups are actively engaged in gathering and introducing the technical methods used in the censuses, the results of which can be accessible through electronic publications (ebooks) and the printed publications. In 1385, in Islamic Republic of Iran compilation of such a collection was included on the agenda and it was provided, at a very limited extent, to the users in the Statistical Centre of the Iran. In addition, after the 1390 Pilot Census in 1388 some actions were taken to identify the technical methods. The present collection has been prepared reviewing the previous reports, taking into account their weak and strong points, and carrying out a comparative study on the other country's performance, in an effort to make it a very comprehensive for the users.

This research project has come to maturity by sincere collaboration of our colleagues, gentlemen Zabyolah Ghaemi, Mohammad Reza Rayhani, Daryosh Mohammadi, Arash Fazeli, Nourmohammad Javeed, Mehdi Vahdati, Reza Salehian, and Ladies Ozra Naeneeni, Shirin Jafari, Samaneh Ghaderi, Khadijeh Karimi, Akram Rasoli, Sadigheh Mirzaee, Neda Mostafavi, Sodabeh Zerbarjad, Marjan Mirzakhali, to all of whom we are grateful. We really appreciate Mrs. Javadi from the Statistical Research and Training Center for refereeing this project and giving valuable comments and Miss. Mehrnoosh Mirmohammad and Mrs. Najmeh Nazerian for taking the responsibility of typing this report. Our special thanks must go to Mr. Hamid Moazzami Goodarzi for translating the text into English.

We welcome any comments and recommendations the readers of this report would like to make on its contents.

Technical Design and Statistical Methods Research Group

Table of Contents

Title	Page
Introduction	1
Chapter 1. Generalities	
1. Generalities	3
1.1. The background on preparing the Census's technical report in Iran	3
1.2. Comparative Study	4
1.3. History of Census of Population in Iran	4
1.4. The Census's goals and objectives	11
1.5. Why to reduce the span between the censuses (from 10 to 5 years)?.....	11
1.6. The Pilot Census	12
1.6.1. The 1390 Pilot Censuses in 1388 and 1389	12
1.6.1.1. The Pilot Census in1388	13
1.6.1.1.1. Major activities tested by the Census Groups	13
1.6.1.1.2. Implementation Time	15
1.6.1.1.3. Geographical Area	16
1.6.1.2. The Pilot Census in 1389	16
1.6.1.2.1. Major activities tested by the Census Groups	17
1.6.1.2.2. Implementation Time	19
1.6.1.2.3. Geographical Area	19
1.7. Managerial Organization	19
1.8. Chat Room in the Census	21
1.9. Time table	21
Chapter 2- The Census Technical Design	
2. The Census Technical Design	25
2.1. Methodology	25
2.1.1. Implementation Methodology	25
2-1-2- Data Collection Method	26

2.1.3. Implementation procedures (Individual and collective)	27
2.1.4. Data collection from the absent households	27
2.2. Needs analysis on the Census's items	28
2.2.1. Criteria and the recommendations of United Nations Statistics Division (UNSD) for the selection of items in the censuses	28
2.2.2. Listing and arrangement of the Census's Items in the Recommendations of United Nations Statistics Division (UNSD)	30
2.2.3. The items demanded and the organizations demanding them	31
2.3. Concepts and Definitions used in the Census	31
2.4. Census items	42
2.4.1. The Census Forms	43
2.4.1.1. Listing Form	43
2.4.1.2. Form 2 (the Household Questionnaire and Form 3 (The Institutional Household Questionnaire)	43
2.4.1.2.1. Items included in Form 2. Household Questionnaire	43
2.4.1.2.2. The Institutional Household Questionnaire Items. (Form 3)	50
2.4.1.3. Form 4 (Village Profile)	51
2.5. Training	55
2.5.1. Training stages in implementation of the censuses in Iran	55
2.5.1.1. Training method in the 1390 Census (E. learning)	57
2.5.1.2. The Software design	57
2.5.1.3. Online question- answering system	57
2.5.2. Coding training in the 1390 Census	58
2.6. Edit and imputation	59
2.6.1. The 1390 Pilot Census in 1388	59
2.6.2. The 1390 Pilot Census in 1389	59
2.6.3. The 1390 National Census of Population and Housing	60
2.7. Coding classification	61
2.7.1. Use of the statistical classifications in the 1390 National Census of Population and Housing	61
2.7.2. Types of the standard classifications used in the 1390 Census	62

2.7.3. Coding operations	64
2.7.3.1. The classifications used in coding the 1390 Census	64
2.7.3.2. Coding stages	64
2.7.3.3. Code verification	65
2.7.3.4. Quality control of coding operations	65
2.7.3.4.1. Urgency	65
2.8. Tables	66
2.8.1. The 1390 Pilot Censuses in 1388 and 1389	66
2.8.2. The 1390 Census Implementation	66
2.8.2.1. The 1390 Census Publications	67
2.8.2.1.1. The Detail Results Issue	67
2.8.2.1.2. Total Results	68
2.8.2.1.3. The Population of the country's cities by age and sex	68
2.8.2.1.4. Tehran's 22 Districts	68
2.8.2.1.5. Bakhshs' (Counties) Profile, and Village Gazzetteer	68
2.8.2.1.6. The Census Selected Findings	68
2.8.2.2. The 1390 Census Results Review	69
2.9. Post enumeration	69

Chapter 3. Map and Spatial Data

3. Map and Spatial Data	71
3.1. Updating the Statistical Maps from 1386 to the 1390 Census Implementation	71
3.2. Geographical File	71
3.2.1. Preparing the Geographical File and matching it with the maps	71
3.2.2. Preparing Geographical File Software	72
3.2.3. Preparing Geographical File containing data on the Enumeration Areas	72
3.2.4. Implementation of the First Phase of Updating Map Folder and Geographical File prior to the 1390 Census	72
3.2.5. Implementation of the Second Phase of Updating Map Folder and Geographical File prior to the 1390 Census	73

3.2.5.1. Updating the E.As Map Folder during the Census Implementation	73
3.2.5.2. Elimination of Discrepancies from the 501 Forms and Map Folder of Enumeration Areas	73
3.3. Updating Geographical File	74
3.3.1. Preparing Final Geographical File for the Census data extraction	74
3.4. Demarcation of Enumeration Areas	74
3.4.1. The household Enumeration	74
3.4.2. Design of Enumeration Areas Software	75
3.4.3. Basic Data required for E.As demarcation	75
3.4.4. Preparing Manual for E.As demarcation	75
3.4.5. Preparing Final Report on E.As demarcation operations	76
3.4.6. Preparing the Maps Folder in Ostans	76
3.4.7. Geometric surveying of changes incorporated into the Folder of maps and preparing File of maps after the Census implementation	76

Chapter 4: Publicity

4. Publicity	79
4.1. Publicity and Data Dissemination in the 1390 National Census of Population and Housing	79
4.2. Experiences of the other countries in publicity for censuses	79
4.3. Implementation of the Research on Social, Psychological, and Communicative Factors Affecting People's Attitude towards the National Census of Population and Housing in 1384	80
4.4. Publicity tools and facilities in the 1390 Census	80
4.4.1. The 1390 Pilot Census in 1388	80
4.4.2. The 1390 Pilot Census in 1389	80
4.4.3. The 1390 National Census of Population and Housing	81
4.5. Design of Opinion Poll: Measuring efficacy of the Census data dissemination and indexes for the statistical awareness promotion in the households responding to the 1390 Census items	83

Chapter 5: Field Operations

5. Field Operations	85
5.1. Field Operations Methodology	85
5.1.1. 1390 Pilot Census in 1388	85
5.1.2. The 1390 Pilot Census in 1389	86
5.1.3. The 1390 National Census of Population and Housing	86
5.2. The Census Executive Organization	86
5.2.1. The 1388 Pilot Census	86
5.2.2. The 1389 Pilot Census	86
5.2.3. The 1390 National Census of Population and Housing	87
5.3. Manpower	91
5.3.1. The 1388 and 1389 Pilot Censuses	91
5.3.2. The 1390 National Census of Population Housing	91
5.3.2.1. The enumerator's work load	91
5.3.2.2. Manpower Estimation	91
5.3.2.3. Grouping and Assigning number of Executive Ranks	92
5.3.2.4. Number of Executive Organization Ranks at the Provincial Level	92
5.3.2.5. Number of Executive Organization Ranks at Sub-provincial Level	93
5.4. General and Private Qualifications of the Census Executive Ranks	94
5.5. Sources for hiring manpower	94
5.5.1. Internet System for the Executive Groups' enrollment	95
5.5.2. The 1390 Census Identification Card	95
5.6. Insurance of the executive ranks	96
5.7. Census' Credits and Expenditures	96
5.8. Providing and distributing the Census's supplies	97

Chapter 6. Data Processing, Extraction and Dissemination

6. Data processing, extraction and dissemination	99
6.1. Technical Support	99
6.2. Data Processing	101
6.2.1. Data Processing Methodology	101

6.2.2. Data Processing Implementation Architecture	102
6.2.3. Preparation of software	104
6.2.4. Data Processing Implementation	108
6.3. Data Extraction and dissemination	109
6.3.1. Data Extraction Architecture (imputation and tabulation)	109
6.3.2. Preparation of Imputation Operations Software	109
6.3.3. Preparation of Tabulation Operations Software	112
6.3.4. Extraction Stages implementation (Imputation and Tabulation)	113
6.3.5. Information Dissemination	117
6.4. Conclusion	117

Chapter 7. Monitoring

7. Monitoring	119
7.1. The Monitoring Executive Organization	119
7.2. The 1388 Pilot Census	120
7.2.1. Phases to be tested	120
7.2.1.1. Manpower hiring	121
7.2.1.2. Training	121
7.2.1.3. Field Operations	121
7.2.1.4. Data input and verification	121
7.2.1.5. Evaluation of Provinces and executive ranks	121
7.2.2. Methods for completing the monitoring forms and reporting	121
7.3. The 1389 Pilot Census	121
7.3.1. Phases to be tested	121
7.3.1.1. Training methodology (classroom training and E-learning)	121
7.3.1.2. Teaching methodology (using slides and text reading)	121
7.3.1.3. Design of the test items	121
7.3.1.4. Implementation methodology (individually and collectively)	122
7.3.1.5. Work load estimation	122
7.3.1.6. Executive organization	122
7.3.1.7. Notice card for the absent household	122

7.3.1.8. Certificate for the Census termination	122
7.3.1.9. The questionnaire items (in terms of household and enumerator)	122
7.3.1.10. Publicity and data dissemination methodology	122
7.3.1.11. Map	122
7.3.2. Methods for completing the monitoring forms and reporting	122
7.4. Monitoring phases of the 1390 Census	122
7.4.1. Manpower hiring	122
7.4.2. Training	123
7.4.3. Publicity	123
7.4.4. Logistics	123
7.4.5. Field Operations	123
7.4.6. Verification	123
7.4.7. Postenumeration	123
7.4.8. Evaluation of Provinces	124
7.5. Monitoring and Reporting Methods	124
7.6. The Monitoring Results of the 1390 Census	124
References	125

Introduction

Information is believed to be the most fundamental implement for development since it is the building block for accurate planning in all fields. Meanwhile, the methods for production of efficient information are a topic which in itself calls for a unique and comprehensive scrutiny. National Census of Population and Housing has been one of the methods for producing information in the last centuries and countries have endeavored to make the necessary arrangements for successful conduct of censuses participating in the related conferences and benefiting from the UN recommendations. For instance, they have followed the 10-year span between the censuses and selected their census years to coincide possibly with the other countries' censuses.

Also, many countries determine the census items with regard to the latest UN recommendations. However, the point that has slipped from the attention of most countries is compilation of the census techniques that would be highly appropriate and applicable to them if accordingly informed. It is noticeable that not all countries enjoy equal development level. There may be cases where a country, that had taken the way in conducting a census, has been imitated by another country in the subsequent years or decades. This proves the fact that the countries are unaware of the techniques and procedures either of them use due to the lack of timely information and interaction. In the recent years, some effective strides have been taken in this respect.

Countries have begun to introduce the techniques used in their censuses. Although there are a new variety of the topics and contents in the technical reports of the census of population and housing, the preparation of the reports of this sort could be an efficient step to prevent waste of human, operational, and technical resources in census taking process.

Chapter 1. Generalities

1. Generalities

1.1. The background on preparing the Census's technical report in Iran

Since 1335, the Statistical Centre of Iran has conducted seven National Censuses of Population and Housing in modern methods using the most recent technology of the world proportionate to the special circumstances in each time and existing facilities. Although making an integrated report on all activities performed in the censuses has not always been possible, the trend of entering such concepts as household, place, etc. into the either of the Census's Enumeration Areas can be drawn up partially based on what has been obtained from the censuses' scattered documents. Also, the techniques used for taking the censuses and the data processing methodologies can be found in these documents. Since 1385, the idea of designing the "Census Technical Report" had begun to emerge among the experts in the Census Organization particularly in the country's Census Headquarters and one year later than the census implementation year a collection called the Census Technical Report on the 1385 National Census of Population and Housing was prepared. The report began to be prepared exactly one year after the census implementation and for this reason there was no immediate and extensive access to the census' executive and technical cadre.

The initial part of this report is devoted to the history of the National Census of Population and Housing from the old times till the introduction of modern methods in taking the censuses in Iran including the details about the last census. Other parts of the report deal with such stages as planning, designing, organizing, publicizing, training for, and implementing the census as well as, finally its data processing and disseminating phases. The subsequent experiences occurred in 1389 and 1390.

The general details have also been presented regarding the 1390 National Census of Population and Housing Pilot Censuses carried out in 1388 and 1389.